

# GREEN'S Fruit Grower

"A MAGAZINE WITH A MISSION"



JULY, 1912



# GREEN'S FRUIT GROWER

## Farmer's Summer Picnic.

By Ada Carroll Wortman.

Our country woman's club had been holding meetings every four weeks since early the previous fall, and we had such good times that we pitied all women who did not belong to it. Why didn't they all belong? Well, I most hate to tell. Some of the husbands had a prejudice against women's clubs, and wouldn't let their wives join. Some of the women themselves said that they did not have time to go skylarking around over the country, neglecting their families and tiring themselves out just to study Shakespeare. You see, they never asked what we intended to study; they took it for granted that because the newly elected president had the year before been leader of the Shakespeare class, there would therefore be nothing else at the meetings. Never were they more mistaken. Shakespeare was never mentioned in any save the most desultory way: for instance, if we wanted an apt quotation to head a program, and one of his lines fitted, we used it, and gave him the credit; or we used his name in the course of a debate, the question being: "Will America produce a Shakespeare, or one as great?" But all this is a long way from the summer picnic that I started to tell you about. We had been having such good times discussing home economics and child training and law and poetry and literature and farm topics and eugenics and a few other subjects, that we wondered if we were not neglecting our men folks, so we announced that our next program would be an all day picnic, with games and a basket dinner. We held it at a time when the work of the farm had relaxed and had a splendid program. Every one in the surrounding country was invited and the way the town people came out to spend the day with us proved that we had something they could enjoy in common. You never saw such a happy, jolly crowd. The woods were full of people of all ages, and many met that day who had not met before for years, and did not meet again till the next year. They had such a good time just visiting that it looked like a shame to call them to order and inflict a program, but we had made extensive preparations, and we inexorably held to our original intention. To our delight, they seemed to enjoy the program fully as well as they did the visiting, but by the time it was over, it was almost noon, so we adjourned for dinner.

Did you ever go to a country picnic, where everybody brought just what she wanted, and as much as she thought would be needed? If you have been there, I will not tell you how much there was, for you do not need the slightest stretch of imagination. If you never were there, it would not be of the slightest use for me to try to enumerate, for you would not believe me. Suffice it to say that we all had plenty to eat, and then we were ready for the fun of the afternoon.

You do not really need to plan much to entertain busy country people, who do not see each other often, for they will usually be so busy talking that they dislike to stop long enough to watch anything, but we felt that this was a special occasion, and we wanted to do something to make it memorable. One of our girls suggested that there should be a game of baseball between two nines of the girls, with a prize to the winners. The game was called at three o'clock, and the crowd of rooters that stood around the diamond would have done credit to a league game in the city. The score stood seventy-four to sixty-seven, and the crowd was so hoarse that it could hardly croak. There were two watermelons for prizes, the winning team to get the biggest melon, and every one agreed that they had honestly earned all that they got. When the melons were disposed of, every boy in the crowd wanted to treat the girls to ice cream.

It was with genuine regret that the happy picnickers saw the sun indicating chore time, but the picnic was such an unqualified success that the club was asked to make it an annual affair. Each year sees some new feature added to the program, and there is never any flagging of interest. Instead, the people are wondering just what we will do next. The town people who flock to our gatherings sigh and say, mournfully, "Oh, what good times you country people do have. I wish we could have such good times in town, but they are so formal there, and will not do anything out of the conventional." Seldom do our young people go to town for amusements, for we keep something going all the time in the country, that is, whenever there is time for it, and the young folks have learned to look forward to our functions, and leave other things out so that they can come with us. There is nothing like being young yourself to keep the young folks near to you.

There is not a country community so poorly equipped or thinly settled that it could not manage some kind of a social gathering once a month all the year round. Think of the leisure of seeing your friends and acquaintances as often as that! And it would not take much of your time. Just hurry through the chores a little faster, and sleep a little later on that one morning. You will find it well worth while, both for yourself and your children. I will be glad to make suggestions from time to time, and help any one who desires it.

## Sum Sayings.

Written for Green's Fruit Grower By Unkel Dudley.

He who works while he waits gains so much more than he who duz not.  
If you want to win the afekshun ov a kat, don't stroke her fur the rong way. This is also tru ov yure naburs.  
If you kant koin goldun thots, koin silver thots an klothe them in the best langwidge yu kan kommand.  
A tooth brush iz good fur the teeth, but er birch brush iz betur fur an unruly boy.  
In religun, Feelin an Sight ar sisturs, but they ar not related to Faith.  
Be kareful what yu say before children, fur they hev susseptibul minds, and their memries ar good.

## Description of a Good Ladder.

Written for Green's Fruit Grower By C. F. Bley, N. Y.

Upon lightness, strength, and general construction of a ladder, depends its practicability as well as the safety of the operator.  
Basswood makes the best ladders, it is light, tough and does not "sliver."  
The form should be somewhat spreading at base up to about the middle of its length, from which point it should narrow to an even width to the top.  
Rounds should be of hickory or white ash, turned smooth, of one and one-quarter inch thickness with the ends fitted like the felloe end of a spoke, to three-quarter inch and come flush with rails at outside ends.  
The standard spacing of rounds is thirteen and one-half inches apart.  
Every round at each end should receive a fine gauge nail, driven through the middle of the edge of rail.  
Every ladder, for use in trees should have attached to its base a pair of steel

spurs. These should be made of new tire steel of 1x1 lighter or heavier according to length of ladder, they should be attached to outside of rails with two carriage bolts, heads inside. These spurs should be forged to a sharp flat point, edgewise; the bottom hole should be 7 inches from point, and the other one, 14 inches from top; the spur should project 4 inches below end of rail.

Spurs not only insure the safety of the user, preventing the ladder from turning or from "kicking," but greatly facilitate the handling of same. Some of our largest fruit growers in Western New York, now equip all their ladders with spurs.

## Kind of Him.

"I am going to ask your father for your hand." "Oh, that will be lovely." "You are glad?" "Delighted! I will call and bring you flowers every day until you are able to be out again. I have never seen the inside of a hospital!"

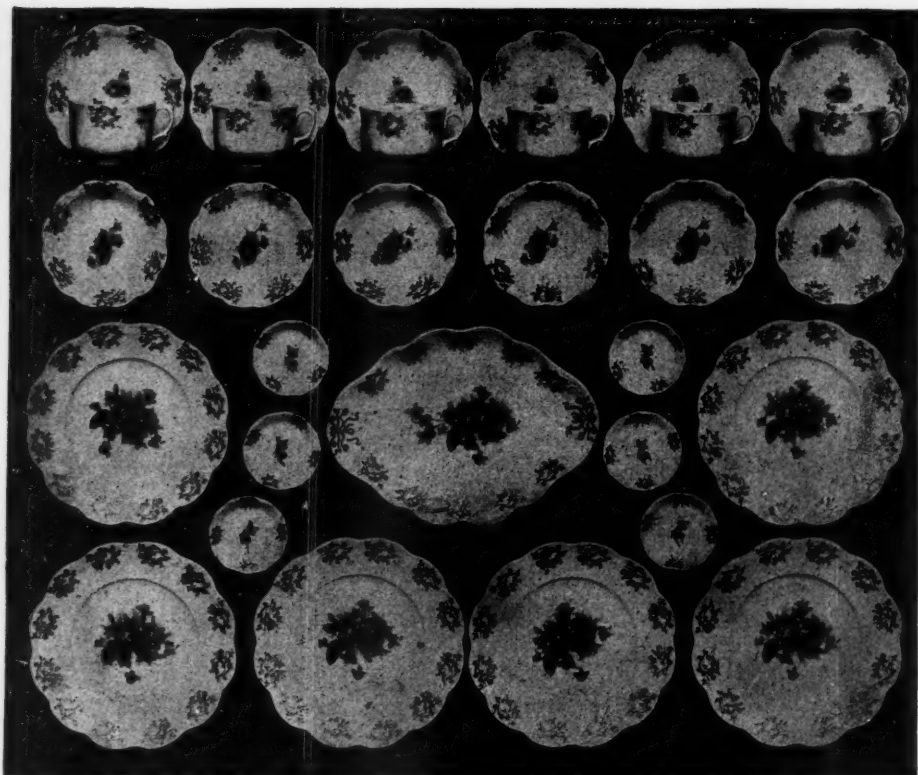
## Maintain the Orchard.

Wherever the climate and soil are at all favorable for the production of fruit, an orchard should form a part of every farm. Fortunately, there are a very few localities in which good fruit can not be easily grown in sufficient quantities to supply the needs of the family, and in most sections it may, to some extent, be profitably grown for the market.  
There is such a thing as going into fruit growing on too extensive a scale. This is true not only in localities in which the work is attended with serious difficulties, but also in those sections in which success is most easily secured. Even where the conditions are the most favorable, careful and intelligent supervision is required. The man who is to succeed must take care of his trees. He must be an earnest student and a patient learner. He can no more become an expert fruit grower in a single season than he could, in the same length of time, become a successful manufacturer, merchant or banker. Young men who have not been as successful with their trees as they desired should remember this and take courage. Experience and perseverance will help them out of their difficulties. But, while it is possible to set too many trees, the great majority of farmers do not make this mistake. On the contrary, they need to be encouraged to set more trees than they feel inclined to plant. They should have larger orchards rather than smaller ones.

# Get a Violet and Gold Dinner Set

The "CARROLLTON WARE" of Violet and Gold Design.

Order this Set of Dishes Now and Make Yourself a Handsome Present



## This Engraving Illustrates the 31 pieces.

This set of dishes in three different colors—violets with green leaves in centre, gold border design.

This ware is of a fine grade of porcelain, which is light weight, and said to be very tough and durable. It is snowy white in color and has a genuine china glaze, which gives it a smooth and velvety appearance.

The shapes are the latest Haviland design, with deep scalloped edges, and handsomely ornamented with scroll work. Each piece is decorated with a beautiful cluster of violets, with foliage and green leaves all in natural colors. Each piece has also an elaborate semi-border of vining sprays in pure gold. The decorations are burned into the ware.

The 31-piece set consists of six cups, six saucers, six dinner plates, six desserts, six individual butters and one meat platter.

Receiver to pay freight or express charges. Weight, boxed, about 20 pounds.

Note.—We have only a few of the dinner sets. Therefore THIS SPECIAL OFFER MUST SOON BE WITHDRAWN. Do not be too late. SEND NOW. It will soon be too late for this LAST CALL.

## READ WHAT THEY SAY ABOUT THEM.

Mr. Charles A. Green:—Received the dinner set in good order; they are certainly very pretty and one of the most liberal offers I have ever seen given with any paper. I thank you very much for the same.—Mrs. R. D. Wilson, Vanceburg, Ky.

Editor Green's Fruit Grower:—I want to write to you thanking you for the pretty dishes we received from you the day before Christmas. The dishes are as you represented them, very neat and nice. We have used them every day since they came. Sickness has delayed my writing you before.—Mrs. Henry Clark, Orange, Conn.

Mr. Charles A. Green:—I received the set of dishes O. K. My wife thinks they are beauties. Please accept our thanks for same. We wish you and your paper much success. The "Fruit Grower" is hard to beat.—Daniel E. Hartnett, Dover, Del.

Green's Fruit Grower:—I have received the dishes and am delighted with them. They reached me in good condition. Thanking you for your liberal offer and straight dealing.—Marcia L. Moore, Battle Creek, Mich.

Mr. Green:—We desire to thank you for the beautiful dinner set you sent us in connection with your good paper a few days ago, which arrived in good condition. The dishes are certainly fine, both in appearance as well as durability.—William Mote, Hayden, Ind.

**Our Special Offer, to Introduce Green's Fruit Grower:** A full three years subscription to Green's Fruit Grower, and this 31-piece set of dishes for \$2.75. HOW TO GET THE DINNER SET FREE. If you are already a subscriber, send us six new yearly subscribers at 50 cents each and GET THE DINNER SET FREE for yourself. Address, Green's Fruit Grower, Rochester, N. Y.

Do not let the fact that you live some distance from us hinder you from ordering as we are shipping these dishes all over the United States.



# GREEN'S FRUIT GROWER

A Monthly Magazine for the Fruit Growing Farmer and His Family

CHARLES A. GREEN, Editor

Volume 32

ROCHESTER, N. Y., JULY, 1912

Number 7

## Home Canning of Fruit as One Way for Women to Make Money.

By Charles A. Green.

It looks as though everybody desires to learn how to make money. I do not doubt that most mortals give this subject too much attention. Life is short, shorter than most of us think it is. Most mortals give the question of money making greater attention than it deserves. Nevertheless if you have a method of making money at home or can learn of one you are interested.

I have a friend who was left a widow at the age of thirty-five years. Her husband was a poor but industrious man who had not accumulated much of anything, therefore this lady was left to make her way in the world unaided.

She was noted for her ability as a cook. Her pantry was ever well supplied with canned fruit, marmalades and fancy pickles of various kinds. One day a casual caller asked this lady why she did not make an effort to sell her products in the way of canned fruit, etc. and thus make a good living.

Our friend immediately acted on this suggestion and began operations in a small way, setting aside a portion of her house for the work, setting up such arrangements and conveniences as she deemed necessary for a small output. She was not at this time a fruit grower, but as soon as possible she commenced to grow strawberries, raspberries and other small fruits, intending to use them all for canning. She was located in Western New York, where fruits of every kind could be grown successfully and could be purchased at moderate prices. Her plan was not to compete in price with fruit put up in tin cans by large canning houses but to pack all of her goods in glass cans and to make them a home product.

She hoped to find a market for her goods among a class of people who would be willing to pay a higher price for a home-made product put up more cleanly and made more attractive and palatable than the commercial canned fruits, pickles, etc.

It is well that most enterprises should begin in a small way. This is absolutely necessary where one has but little money to begin with, as was the case with our lady friend, whom I will call Mrs. Brown. She confined her first work to strawberries, raspberries, peaches and cherries. The first season, not being certain whether the goods would be marketable, she put up only about two hundred cans of these fruits. She visited the grocers of her town and showed them her product, but it was their opinion that her canned fruit would not sell in competition with the factory made fruit put up in tin cans, which they could sell at a lower price, thus she gave up selling to the grocers.

Yet she was aware that there was one noted commercial canner who was getting fancy prices for his product, and whose goods were constantly on sale at the grocers, but this man had secured a high reputation through many years of service and had already made a million dollars through fruit canning and other similar work.

Then Mrs. Brown started out with a handbag containing one glass of straw-

berries, one glass can of raspberries, one of peaches and one of cherries, determined to visit the houses of well-to-do citizens in her town, which was a large and enterprising village. Being a lady of good address and appearance, she had no difficulty in gaining entrance to the best houses and generally of securing the attention of the lady of the house. In most instances she was successful in placing a small order in the house. After these people who had bought her fruit in a small way had tested it and found it far superior to the canned fruit put up in large factories, she made these people

small business may increase and become a very large and profitable business, these beginners drop out on the road to success and give up the enterprise. I wish therefore to emphasize this fact, which I have discovered myself in my own affairs, that it is the persevering, those who keep everlastingly at it, who meet with success. There seems to be no such word as fail for the competent man or woman who starts out determined to do something, providing the proper foundation is laid for the enterprise.

I am continually asked if this business or that or the other business can be made profitable. My reply is yes, every line of work can be made profitable by the proper person. Every kind of business is profitable, for if it were not profitable, no one would continue to engage in it. We must concede that much depends upon the individual and his or her executive

best for anyone starting in the home canning business to grow her own fruits. This is not absolutely necessary and may in some instances not be desirable. The growing of fruits is an arduous undertaking, requiring prompt attention and much help in caring for the plantations and picking the fruit. You should locate near berry plantations and fruit farms where you can get your supplies, but you can usually buy your supply of fruits, etc., at wholesale nearly as cheap as you can produce it. Then if there happens to be a large crop of strawberries and low prices, or of raspberries and peaches and low prices in any certain year, you can take advantage of such circumstances by enlarging your output of those products.

### Canning Tomatoes.

Select nice solid tomatoes and skin them. Place them whole in a dripping pan, sprinkle with salt and sugar. Do not put in any water, as they will make their own juice. Place in the oven and when thoroughly heated through, lift out whole, placed in heated jars and seal at once. When cooled, put jars in paper sacks and set in a dark cool place.

### Home Canning Plant.

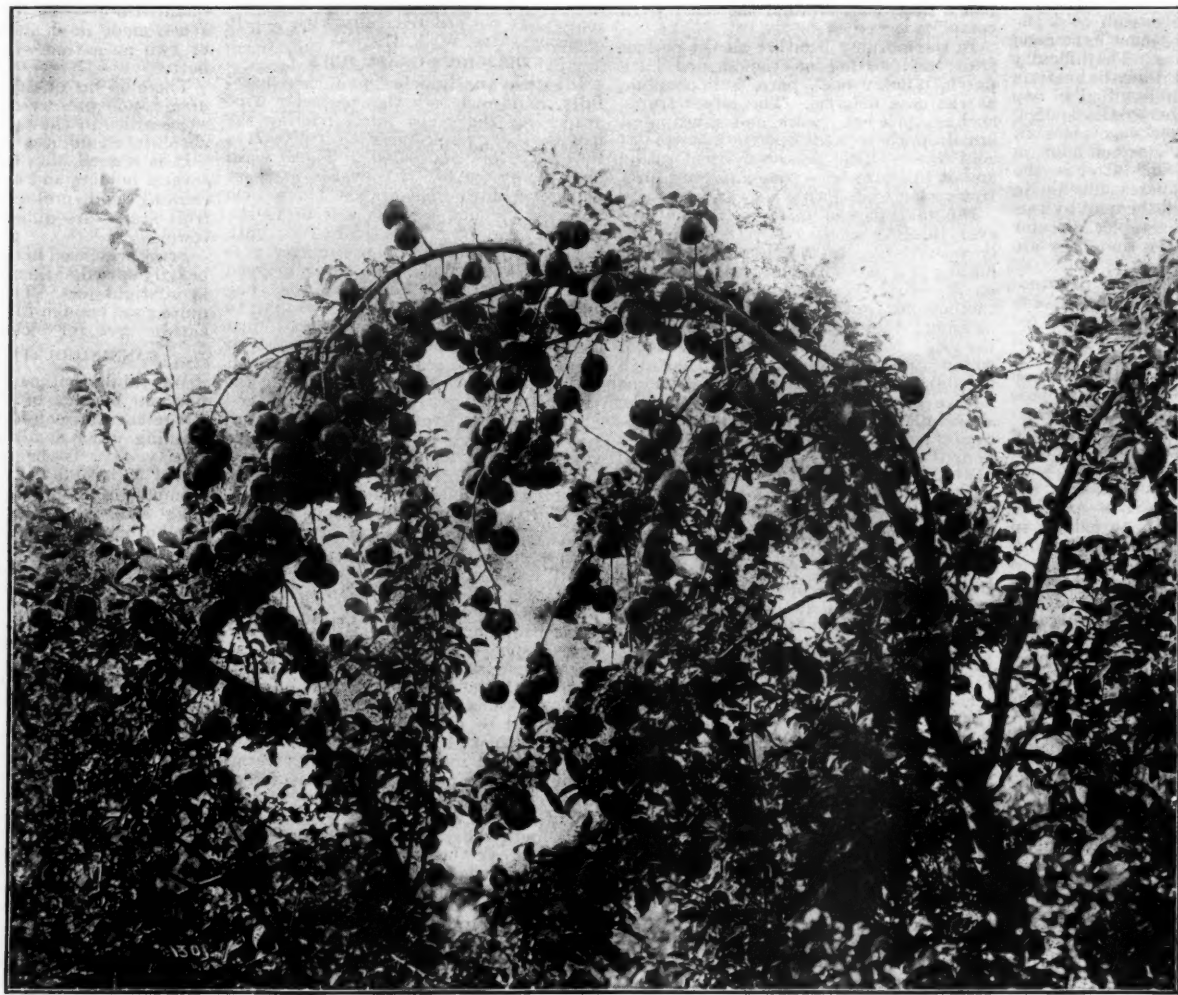
By-products and side lines on the farm are subjects of growing interest these days; add to this the desire on the part of the owner of a small bit of ground to get as many dollars as possible from each acre, and you have sufficient reason for the interest in the subject of small commercial canning plants on the farm, says Orchard and Farm.

It is not to the best interest of the farmer to sell his product in the raw state, and let some other fellow put it in condition for the table or the merchant's shelves and incidentally, make the larger profit. The farmer should aim to produce as near as possible a finished product on the farm. Then he experiences the fascination of being a real manufacturer, so to speak, putting an article on the market bearing his own name. His canning plant gives employment to his wife and children who find it a welcome change from the regular routine of farm work.

### Suggestions For Canning.

From The Ohio Farmer, by Permission. (Copyright.)

Mrs. Foulk's talk on "Canning of Fruits and Vegetables" set the pitch of interest which was maintained throughout the entire program. Among scores of practical statements made by Mrs. Foulk were these: "Most women can fruits and jellies; few can vegetables. There are tiny plants all about in the air, ground and everywhere which concern themselves with housework. There are the yeasts, which are both friends and foes—friends in bread and foes in fruits. Others of these plants are molds such as are familiar to us on fruits, stale bread, old leather and other places. These two do damage to canned fruits. The third variety of tiny plants are bacteria, which are much harder and it is their presence which makes canning of vegetables so difficult. Yeasts and molds like sugar; putting sugar in canned fruit pleases them, but they are also killed by too much sugar, as we learn when we preserve fruit. The object in canning is to kill all yeasts and



A Branch of Johnson's Winesap Apples.

her permanent customers who came to to her year after year for their supplies. Gradually this lady's reputation extended to other towns and gradually to the larger cities.

After a few years of successful experience in selling her goods, Mrs. Brown enlarged her plant and her facilities, employed skillful assistants, enlarged the number of varieties of fruits for canning and added various kinds of fancy pickles, marmalades and fruit juices. Then she found it necessary to issue a circular calling attention to her work. In this circular she described various fruits which she had prepared and told of her method of doing business. This circular, which in after years was enlarged to quite an illustrated catalog was mailed to wealthy people in distant cities and to her patrons wherever they were, and in this way her business continued to increase each year.

There are few people who realize how any business well conducted, where the product is honestly prepared and marketed, will increase of its own natural growth day by day and year by year. Most people when they start out in enterprise and find it growing slowly, as all enterprises do on the start, become discouraged, feeling that there is no hope. They find others occupying the field and, not knowing that these successful competitors started slowly and with discouragements, and not knowing how even a very

ability, close business like management and persistency of purpose, and also a faculty for approaching people or salesmanship.

I have had some dealings with Mrs. Brown. Every season she sends to Rochester, N. Y., for a lot of peaches for canning. She insists on buying the very best grade of peaches that can be found in the market. I assume that all of the fruit and all of the material which she uses is of the best possible character. Here is one reason for her success and for the quality of the product she makes.

No one should be induced to undertake this enterprise or any enterprise expecting that there are marvelous profits in it. If there were astonishing profits in any line of business there would soon be so many competitors that the price of the product would be reduced below that for which it could be sold at profit. Large profits are usually made by making large sales even though there is but a small margin of profit on each sale. When you have established a business like this, where you can make a large profit on large sales, then you have a business which no one can take away from you.

When one is firmly established in a certain line of business, when the business is growing so fast that it is hardly possible to keep pace with it, then you may be able to increase the price.

I am asked whether it is necessary or



molds, and not let others in. This is why we use scalding hot water in every detail in canning. Bright fruits, such as tomatoes and peaches, fade in the strong light, hence we put them in the dark when canned. Glass is more economical for jars for canning than tin. Tin should not be used more than two years or there will be danger of poisoning. Glass jars must have metal lids and rubbers replaced often, every year is best. There are three varieties of glass jars used: 1. The most common and the worst kinds are those having metal screw tops, because metal and glass are brought into contact and they expand at different temperatures, allowing spores of mold to enter. 2. Vacuum, which are sealed by air pressure; these are not wholly reliable. 3. The glass jars with glass lids held down by a spring. The latter make the surest can.

"Our mothers knew nothing about bacteria," continued Mrs. Foulk, "they just canned fruit. Some of it kept, some of it did not. They did not know why, and in this, as in many other lines of housework, did much unnecessary work. We must study to work efficiently and to know why. Make up the syrup for canning the day before if you like; cook fruit in cans in a steam cooker or wash boiler, putting lids on loose. I had a galvanized wire basket made, at a cost of \$1.75, to fit my wash-boiler and hold my cans in place. Soft fruits, like red raspberries, may be canned in the fireless cooker after five minutes' boiling over the fire. Put only two or three inches of water in the boiler or cooker, and let steam cook the upper part of the can. We must have good jars for canning vegetables. The difficulty in vegetables is that of killing the bacteria plants. The plant itself is killed in one hour with heat, but not so the spores, therefore we must cook vegetables in cans five or six hours or else one hour on three successive days. The latter is the safer way because all spores develop in three days, thus we catch them all by this process; besides the vegetables discolor less. Loosen the lids each time they are heated.

"Many women use canning powders. Many states prohibit the sale of such preparations. One kind that sells for \$1.25 a package, when analyzed, showed three cents' worth of material. If it is bad for a commercial canner to use these preparations, it is worse for housekeepers to do so. He does so because he's dirty; she does so because some neighbor told her it is a good thing. She does not need it; heat is all that is necessary.

"In jelly-making two substances are necessary. One of these is pectine, which in fruit corresponds to gelatin in animal substances. This will not work without acid, hence we find it difficult to make jelly from such fruits as the peach without the addition of lemon or tartaric acid or combining with other acid fruits. There is less pectine in dead ripe fruit than in partly ripe fruit. Crabapples, quinces, and grapes have plenty of pectine, so much so that extractions may be used. For instance juice may be taken from the grape, water added to the residue, and jelly made from this juice which will be free of sugar crystals. If too much sugar is used in jelly making, the jelly will run and be soft; if not enough, the jelly will be tough. Sugar is liable to be high-priced at canning season, therefore better provide it early. In dry seasons there is more sugar in fruit than in wet, and less is required for jelly. Strain the juice without squeezing the bag, else scum will form; better add water and cook again. There is no difference in cane and beet sugar for making jellies. Most of us cook jelly too long; six minutes is long enough ordinarily. Add heated sugar when juice has boiled half the required time."

#### CANNING AND PRESERVING METHODS AND RECEIPTS.—FROM SOUTHERN RURALIST.

##### FRUIT IN SYRUP.

I always have the best success when I can my fruit in syrup. I use glass jars for everything I can. Berries and all mellow fruit require but little cooking, only long enough for the syrup to penetrate through. The great secret of canning is to make the fruit or vegetables perfectly air-tight and the can filled to the brim.

I take one cup of sugar and two cups of water for one quart jar, let this boil until it forms a thin syrup. While my syrup is boiling, I fill my jars with the raw fruit, packing as tightly in the jars as I can without bruising the fruit. Then I pour the hot syrup over the fruit until the jar is full; dry the jar and place the rubber on, which has been previously dipped in hot soda water to sterilize them. Have your lids hot and seal perfectly air-tight. I take my reservoir tank, place a rack in the bottom, set my jars on it, and fill with cold water up to the top of the jars. Then place over the fire and heat until the water boils. Take them off and set aside until the water is cool. Remove the jars, wipe dry and put in a cool, dark place. Fruit put up this way

will keep four or five years and will retain both the flavor and the natural color of the fruit.

When I moved South, a year ago, I shipped my fruit over 700 miles. I exhibited some of this fruit at the fair last fall and it took first prize. I had canned it two years previous to this.—Mrs. A. F. Means.

##### MONEY IN FANCY GOODS.

We live on a small country place, well stocked with all kinds of fruit, also have a good vegetable garden. I had always been successful in "putting up" fruits and vegetables, therefore, some years ago, I began "canning for profit", and the longer I keep it up the easier the work becomes and the greater the profit.

Everything is canned in glass, and nothing is used unless absolutely perfect. I buy the Seal Fast jars by the dozen, 85c. for pints, 97 for quarts, and \$1.40 for half-gallon size; this includes the rubbers; buy sugar by the hundred pounds.

By canning, which really means simply sterilizing, all the natural flavor of the fresh fruit is retained. The process is also less troublesome and much more economical than any other way. Fruit may be canned without sugar and sweetened at the time of serving, if so desired, as the sugar takes no part in the keeping qualities.

For years I used a large porcelain-lined kettle, but this year invested in an aluminum kettle. A glass dipper, which may be bought for 10 cents, a large square tin pan a little smaller than the stove oven complete the outfit.

In the morning I gather all the perfect fruit, and sitting on the shaded back porch, quickly peel, pare, hull or stem, as the case may be. The larger fruits, such as peaches, pears and pineapples, are dropped immediately into a pan of cold water. This prevents discoloration and at the same time keeps the fruit firm. In very hot weather use ice water.

Do not put the fruit on to boil till everything is ready, the jars thoroughly washed, the tops, spoons and dipper boiling in a pan. The large pan is placed on the stove, a folded turkish towel on the bottom; on this are put as many jars as required and cold water is poured into the pan. Next, the fruit is boiled in clear water until tender, carefully lifted with the dipper and arranged in the jar, so as not to break the pieces or destroy the shape, fill quickly to overflowing with the liquid, run a silver knife (which has been boiled) around the inside to break up all air bubbles that may have been formed, adjust the rubber, lift the top from the boiling water with the knife and put it on at once. Screw the top on nearly tight; when the jars are all filled, invert another pan over the first, and leave on top of the stove, or, if more convenient, place the pan in the oven. Let the water boil from twenty minutes to half an hour, then take out the jars, wipe dry, tighten the top and invert jars.

Next morning, if any jar has leaked, recock and fit new top. Never stir, as that is apt to break the fruit, nor cook more than two or three jars at the same time. If the fruit is to be sweetened, much of course, depends on the fruit, but a safe rule is a quarter of a pound of sugar to a pound of fruit.

I never cook more than one kind of fruit at the time. The surplus juice may be boiled down to a jelly, or have more sugar and fruit added and made into jam.

If a rich preserve is wished, cook the fruit as directed in clear water (this keeps the color better), then cook a few seconds in thick syrup and seal. Small fruits retain their shape and color much better if put in the jars uncooked and more time allowed in second cooking.—Addi Rolf.

##### PROFITABLE OUTFIT AND MARKETING CANNED GOODS.

Our stock consisted of peaches, blackberries, tomatoes, beans and a very few apples. We used only perfect fruit and vegetables, with attractive labels. The peaches and berries had standard amount of sugar. We sold part of our stock to the little country store here, and disposed of some to friends and acquaintances. By Christmas we had entirely exhausted the local markets. Early in the fall my husband went to a number of grocers in a nearby town and tried to sell them. Some half-way promised to buy if they found samples satisfactory, others said there was a sale for only well known brands, and not much sale for a high-priced quality of goods. On returning at intervals of a month for several months he always found our samples pushed back out of the way, and still unopened.

We still had about eight hundred cans that were becoming a burden. In our extremity I wrote to a daily paper. They published my letter as an advertisement and our troubles were soon ended, as we received orders for all we had, and could have sold more.

There is certainly no fortune in canning on a small scale, but there is a nice profit and a deal of pleasure to one

who is painstaking and loves the work. Below is an exact account of our last season's canning:

1500 cans, \$29.58; capping steel,	
\$2.00; 4 lbs. solder, \$1.00.....	\$32.58
2 quarts flux, 40c; freight, \$3.34....	3.74
Sugar, \$10.00; labor, \$10.65; wood,	
\$2.95.....	23.60
34 bu. peaches, \$34.00; 15 gal. berries,	
\$2.55.....	36.55
Labels, \$5.16; shipping crates, \$2.70	7.86

Total expenses.....\$104.33

##### SOLD.

55 dozen No. 3 cans peaches at \$1.75	\$96.25
38 dozen No. 2 cans blackberries, at \$1.00.....	38.00
18 dozen No. 2 cans beans, at 95c.....	17.10
5 1-5 dozen No. 3 cans apples, at \$1.75.....	9.33
9 2-3 dozen No. 3 cans tomatoes, at \$1.20.....	11.60
18 dozen No. 2 cans tomatoes, at 90c.....	16.20

Sold for.....\$188.48

Cost.....104.33

Profit.....\$84.15

We felt that some of the above prices were much too low for the grade of goods but one has to gain a reputation, and then if the standard is lived up to, it is not hard to get the top of the market for the goods.

We expect to have even a prettier grade of peaches and tomatoes another season, as we ordered cans with 2 7-16 opening.—Mrs. W. T. H.

##### DELICIOUS GRAPE JUICE.

I gather the bunches and then carefully hand-pick all the perfectly ripe grapes for the grape juice, putting the half-ripe or green ones to themselves for jelly or marmalade. Then wash and barely cover with water and set on stove until the grapes burst. Do not boil or cook as that will bring the tartaric acid from the seed. Pour into bag to drip and under no circumstances squeeze bag. When all has dripped that will, strain through another bag and then through flannel. Sweeten to taste and put back on stove and, just as it begins to boil, put in bottles or glass jars and seal. When opened it tastes just like grapes fresh from the vine. It is delicious and refreshing.

In summer, when you do not want to cook any dessert, a slice of cake and glass of grape juice is just fine.

The remaining grapes in bag can be squeezed and make real nice jelly.—M.S.E.

##### CANNING AND PRESERVING.

In canning, cleanliness, timeliness and perfect sterilization sounds the key-note. Fruit must not be over-ripe or under-ripe; vegetables must be crisp, tender and in perfect condition.

In canning strawberries, logan berries, raspberries and blackberries, I always clean and drain them thoroughly, cover with the required amount of sugar and let stand several hours, when the sugar will be dissolved and a rich juice formed; then, I heat them thoroughly, can and seal immediately. They retain their beautiful color and delicious flavor, when cooked in their own juice.

Purple and white grapes I wash carefully and remove the stems, being careful not to break the skins. I fill glass jars with the grapes, cover with clear, cold water, and seal air-tight. Keep in a cool, dark place. (We presume these are brought to the boiling point, too?) I have never had a jar to spoil.

I can green peas, string beans, asparagus and rhubarb in the same way and they taste delightfully fresh and good when opened in the winter.

I can sweet potatoes and green corn, also pumpkin, by preparing it as I would to use immediately; fill tin cans or glass jars (pint size), cover with water, add a little salt and sugar, screw the cover on loose and place on a rack in the boiler; fill to nearly top of jars with cold water and bring to a boil. Boil steadily three hours, screw tops on tight, let cool and remove to cellar.

I can a few jars of cherries, blueberries, elderberries and blackberries that are sweetened with sorghum; they will make delicious pies. Add a slice of lemon to each jar of elderberries. Add a leaf of rose geranium, mint, or peach or cherry leaves to glasses of plain apple jelly to impart a new delightful flavor.

Cook tomatoes in their own juice, season with salt, pepper and a little sugar, and seal while scalding hot. Keep in a cool, dark place. Add a little soda to wild plums and crab-apples and they will not be bitter.

If jellies are poured, instead of dipped, into glasses, the jelly will not be cloudy. Cover all fruit butters with a light layer (or sprinkle rather), of ground cinnamon and no mould will ever form on top.

I cook mushrooms in plain, salted water, seal while scalding hot in tin cans and have no trouble in keeping them.

Ripe muskmelons, cooked and seasoned with spices and sweetened a little make a delicious "spread," almost as nice as

peach butter. An over-ripe (but not spoiled) watermelon, (the red part), may be combined with a few ripe tomatoes, sweetened generously, and cooked down into a lovely preserve. May be put through colander if desired and is fine; also has a beautiful color; a little lemon peel improves the flavor.—Mrs. Wm. B. Shull.

##### CANNING AND PRESERVING HINTS.

Before putting away canned goods, brush the edge of the lids with melted paraffine.

For strawberry jam, use the following proportions: Four pounds strawberries, 2 pounds sugar, 1 pint currant juice.

Besides making an excellent canned fruit, the juice of canned pineapple is an excellent remedy for sore throat.

When I run short of glasses, I put up jams and preserves in pint milk bottles, and seal the tops with melted paraffine.—Mrs. L. M. D., Michigan.

Filled jam or jelly glasses should not be covered until the contents are thoroughly cold, as otherwise the evaporation will cause a mold to form on top.

An open box of thyme placed in the closet in which jams, jellies and preserves are stored will prevent mold from gathering on them.—Mrs. M. A. P., Illinois.

I like to set jelly in the sun a few days and I always choose a sunny day to make jelly, and never make more than a quart or two at a time.—Mrs. M. R., New York.

It is best not to try to make large quantities of jellies or jams at one time. When made in small quantities—a quart or two at a time—they turn out much better.

There is no question of luck in canning and preserving. The secret of success lies in the use of best materials, absolute cleanliness and common sense.

It is a good plan to have in readiness several holders and cloths for use during canning and preserving time, because fruit stains are difficult to remove from towels.

Fruit preserved in a sour or thick syrup, heavily spiced, does not need to be canned in air-tight jars. The jars that are not quite good enough for the regular canning can be used for pickled fruits.

##### CANNING OUTFIT EXPERIENCE.

We think that canning is a very important branch of farming, especially where there are children. We have been canning on a small scale for the past four years. To begin with, we bought a No 3 Special of the Modern Canner Company's make, which is a home canning size. Our force is composed of my husband, three children and myself.

It is very important to have a shed or house of some kind, with shelves and benches to put cans and vessels on, and for packing and peeling fruit, also a good sized table on which to seal the cans after they are packed.

We can tomatoes, apples, peaches, berries, beans and corn. Our success in keeping the various things we can has been extremely good. We seldom lose anything.

To can tomatoes we first pick good well ripened stock. Then we wash well, picking off all stems, put them in the blanching basket and scald until the skin bursts, pour out in a clean vessel. We use a galvanized iron tub. When peeling hold over a clean vessel to catch the juice for use in packing. We do not use water in tomatoes. When there is not enough juice from peeling we always have plenty of the smaller varieties of tomatoes to scald and squeeze the juice out to supply the required amount. Wash cans clean, fill cans well, pressing in lightly until within about half an inch of the top of can, and if there is not enough juice rises to cover well, pour in until well covered, should be filled to about three-eighths of an inch of the top, then seal leaving the vent in the middle of cap open, process five minutes, seal the vent, cook sixty minutes.

For apples and peaches peel, leave out all bad stock, cut in convenient sizes, fill cans well, press lightly, fill with either clean pure water or light syrup made of granulated sugar, process and cook same as tomatoes.

For blackberries prepare same as for glass cans, put in cans hot, seal, tip cans while hot. They are ready to put away. They are as good as when put up in glass jars.

For beans, use either all snaps or half snaps and half shelled, as is preferred. We can altogether half and half for both home use and for market. String and shell, break snaps very short, put in a thin sack (we use a flour sack), put in boiling water three to five minutes, pour out in vessel, put in cans hot, press well, fill with light brine boiling hot, seal and tip, cook for sixty minutes, take cans out of boiling water and put in cold water. This is best for all canned goods.

For corn take very tender roasting ears, of any variety, clean well, cut off with sharp knife, scrape the cob with the back of the knife, scrape lightly, this is very important, fill cans, pour in light

boiling water for four or five minutes, then one can, sold for good from had a c together to make good. We can industry of farming pleasure in canning using cans peach and okra. We use all fruits about the water to put vesse can boiling tight, tak turn down the can is juice run press down around. I repeat.—M

There is that will son. No of fruit to without a pears and A wire will also b matoes in water for immerse in ing the fruit kinds of p successful same way. I use onl in the long no risk of your fruit glass thore should never jar filler. A funne well, but o same as a on jars h cooked in fruit is hot leaving no After fill the inside some more seal at once. If you c fill the ja boiler on a wooden sla on. Place boiler and to within a ually bring When the oughly heat ing with ho Never try jars have h it loosens th When coo and set in a quires a litt but a little e fruit is done From the taking the tion, I belie can and pro goods rather cipal fruits are apples, p and berries.

I have al am in my el I think that recipes are a try, especia and hired h will give a f I don't kn it jelly or ja I gather my them in a v let them boil sieve (the kin over another turn till all leaving all se third as muc till the consi this is not s but is nice f away with th I have nev in glass, bu while the fr for table use When they a a much nice are put up s We raise a in South M them for pre preserves out vinegar to



boiling brine, seal and tip, cook rapidly for four hours. We have never lost more than one or two cans of corn.

We always use the No. 2 and 3 packers' cans, solder hemmed caps.

Our success in marketing has been good from the start, and we have never had a complaint. We have sold altogether to our local market, offering to make good anything not found to be good. We find good sale for all goods we can put up, also find the canning industry to be a very profitable branch of farming, and we get a good share of pleasure from it. We never use any canning powder of any kind. Our success using glass jars has been good. We can peaches, apples, berries and tomatoes and okra in glass.

We use the same method for canning all fruits in glass. Cook tender, or about thirty minutes, put can in cold water to cover about one-third of can, put vessel on fire and boil, put fruit in can boiling, put on lid and screw down tight, take can out of boiling water and turn down on lid, if no juice runs out the can is ready to put away, but if the juice runs out, use a spoon handle to press down the edge of the lid all the way around. If this does not stop the leak, repeat.—Mrs. Joe J. Hogue.

#### CANNING IN GLASS.

There are a number of contrivances that will greatly aid in the canning season. No one who has a large amount of fruit to put up should try to get along without a parer and corer for apples, pears and peaches, and seeder for cherries.

A wire basket for scalding tomatoes will also be found convenient. Place tomatoes in basket and suspend in scalding water for five minutes, then take out and immerse in cold water. This saves breaking the fruit and burning the hands. Some kinds of peaches and plums can be very successfully scalded and pared in the same way.

I use only glass jars, as they are cheaper in the long run than cans, and one runs no risk of poisoning. If you would have your fruit keep perfectly, sterilize the glass thoroughly in boiling water. One should never try to do without a fruit jar filler.

A funnel serves the purpose very well, but one that screws on the jar the same as a lid is better. Place rubbers on jars before filling. Fruit can be cooked in an open vessel. Be sure the fruit is hot when dropped into the jars, leaving no room in jars for air.

After filling a can run a knife around the inside to break bubbles. Pour in some more juice until can is full; then seal at once.

If you desire the fruit kept whole, fill the jars before cooking. Place a boiler on the stove and put some small wooden slats on the bottom to rest jars on. Place jars on boards in bottom of boiler and pour water in until it comes to within an inch of top of jars. Gradually bring to a boil.

When the fruit in the jars is thoroughly heated through fill to overflowing with hot juice and screw the lids on. Never try to tighten the lids after the jars have become thoroughly cooled as it loosens the rubbers and lets the air in.

When cool, wrap each jar in paper and set in a cool place. Some fruit requires a little more cooking than others, but a little experience teaches us when the fruit is done.

From the financial point of view, taking the same fruit into consideration, I believe it is always economy to can and preserve one's supply of such goods rather than to buy them. The principal fruits canned by the farmer's wife are apples, peaches, plums, pears, cherries and berries.—Mrs. J. M. Brandt.

#### JAM WITHOUT SEED.

I have always lived on the farm and am in my element when fruit time comes. I think that the simplest and cheapest recipes are always best, here in our country, especially, where fruit is scarce and hired help almost unavailable, so will give a few of my favorites.

I don't know whether you would call it jelly or jam, but in the berry season, I gather my berries, clean and wash, put them in a vessel and cover with water; let them boil a few minutes; have ready a sieve (the kind that turns with a crank), over another vessel; pour in berries and turn till all juice and pulp go through, leaving all seed in sieve; add about one-third as much sugar as for jelly and cook till the consistence of jelly. Of course, this is not so clear and pretty as jelly, but is nice for cakes or dessert and does away with the seed, as in jam.

I have never canned much fruit, only in glass, but I always add my sugar while the fruit is cooking, just enough for table use and I never lose a can. When they are ready to use, they have a much nicer flavor than when they are put up sour.

We raise an abundance of pears here in South Mississippi, but so few like them for preserves. Mother makes nice preserves out of them by adding a little vinegar to the syrup while cooking.

This furnishes the acid that the pear lacks and helps them to cook firm.

#### THE GIST OF CANNING.

The reasons and practical methods for canning fruits and vegetables are admirably presented by our contributors.

In connection with these contributed articles it may be useful to present a few of the simple principles on which canning rests.

The object of canning is to prevent decay. The cause of decay is the growth and reproduction of germs. It is, therefore, obvious that no decay can occur except for the presence and activity of these germs. Excluding or killing of germs prevents decay. That single fact is the secret of all preservation by canning.

Cooking of itself is of no value. Uncooked articles keep just as well as cooked ones—even better—if the germs of decay are either absent or destroyed. The sole action of heat in the canning process is to kill the germs of decay. The only reason for "exhausting" cans or driving out the air by heating is simply that all air contains germs and by driving the air from cans germs are driven out at the same time.

Any means by which germs are destroyed or made less active—killed or weakened—preserves perishable articles.

Sugar, vinegar and salt are the commonest of such preservatives. Their usefulness depends solely on the fact that certain germs do not thrive—or exert full activity—in one or the other of these substances.

Sugar, salt and vinegar are chemical compounds with definite composition and properties. There are other chemicals possessing far greater germ destroying powers than these common household

Tomatoes—Gather only good ripe sound tomatoes early in the morning, smooth, meaty rich red varieties the best, place in wire basket, scald to remove skin, peel, drain off surplus juice, fill cans well, exhaust eight minutes, cook fifteen minutes.

Beans must be young and tender, string, break in short pieces, put into thin sacks, boil ten minutes, fill solid into cans, salt to taste, exhaust ten minutes and cook forty-five minutes.

Then came the Elberta peaches. I make my own syrup out of granulated sugar, and strain it. Out of 100 3-pound cans put up I did not lose one, and I want to say that I never ate any canned peaches put up in California that surpassed them. I retailed what I had to spare of these at 20¢ per can, or \$2.40 per dozen.

I also canned butter beans, beets, apples, pears and corn with equal success, except corn. I lost heavily on corn, for the reason that I overlooked the instructions to put in salt. We often open two 3-pound cans of tomatoes at one meal, as wife and our four children are very fond of them, and the same way with peaches.

I can assure you that the product of our little canner has cut down our living expenses almost half, and the expense of canning is not much. Your own family can help you do the work—besides, the canning season comes on in the summer when it is an idle time on the farm.—J. C. Henderson.

#### Home Canning Pays Well.

Written for Green's Fruit Grower

By H. L. Newland, Wis.

It takes two years for big crops in this country to make a surplus and we start in

would reap the full measure of profit from our labor. It is alright to sell the early products in the raw or fresh state, as there is a good market, but after that we should equip ourselves to can our crops so as to be independent of glutted markets and the unprincipled broker or commission men who takes the lion's share of the profit and lets us hold the sack.

There are canning outfits on the market today that will enable us to obtain the same results as the Commercial Factory and turn out a superior quality of canned foods. This is a comparatively simple process and the investment is small. The work may be done by our own families, thus solving the labor question; our crops are taken care of when they should be, and marketed when we have the time and the prices are higher.

The public is more than willing to meet the producer half way. They are willing to pay for quality when they know where to get it. Put your canned goods out under your own label and build up a business that has the biggest future of anything on the business horizon today.

#### Hints in Pear Growing.

"The pear tree grows best and yields the most fruit when planted upon land moderately moist, and yet not cold. To insure this condition there is nothing better than a side hill location, though one more level may do well if underdrained, and then it is better for receiving a wash of sand from the uplands above it, which helps to warm it up. Two conditions are fatal to this fruit, and they are a lack of moisture in the soil and a lack of dryness in the soil. They may live through either for a little while each season, but too long a drought will kill the tree, and too long a wet and cold season will destroy the fruit even after it has formed. Manure too rich in ammonia will cause excessive growth of the fruit buds, and overbearing while the tree is young shortens the life of the tree, and also is apt to lessen the crop in the succeeding year."

Weed Seeds.—Dr. Peters has been experimenting with seeds taken from different depths of soil in a dense wood from 100 to 150 years old, which had been arable land for many years before it became woodland. His object was to discover how long the seeds of weeds would retain the power of germinating after they had been buried in the soil to a depth where they could not sprout. Soil samples were taken at various distances from the surface to the depth of a foot. These samples were placed under genial conditions, and the seeds which germinated were raised and cultivated to a flowering stage. Although the land had ceased to be arable between 300 and 400 years before, the weeds of cultivation were abundantly represented, and Dr. Peters claims to have proved that the seeds of many field and pasture plants retain their vitality considerably more than half a century.

#### Popular Science.

In a recent report to the United States Department of Agriculture Mr. Alexander McAdee states that the liability to damage from lightning decreases in thickly-populated districts the risk in the country being, in general, about five times as great as that in the city.

That handy illustration for rhetorical discourse, the germination of wheat buried with a mummy thirty centuries or so ago, is unfortunately a flight of imagination beyond the dream of Munchausen. At a meeting of the Royal Botanic Society of England, the secretary said that fifteen years ago was as long as he had undoubted evidence of a seed retaining its power of germination. Sir B. W. Richardson said that he had planted many seeds found with mummies, but none of them had ever developed.

There is a general impression that the humidity of the air is greater in the woods than in the open fields. This is contradicted, however, by the result of observations recently made in Germany. It was found there that the humidity, both relative and absolute, was slightly greater in the open than in the woods, and this was true equally in the morning and in the afternoon. As to the temperature of the air among the trees, it was a trifle higher than in the open in the morning, and in a more marked degree in the afternoon.

#### ALBION FARMER GETS BAD ELECTRIC SHOCK.

While Spraying Fruit Trees. Condition Is Serious.

Mr. Long, with his two sons, John and Edward, was operating a spraying rig in his orchard. He was holding one of the poles on top of the rig from which a stream of liquid was thrown on the tops of the apple trees. The fluid came in contact with the electric wires and formed a circuit through Mr. Long's body, throwing him from his spraying machine and seriously injuring him. He was rendered unconscious and taken to his home.

He appears to be helpless and is in a serious condition.



A Dorothy Perkins Rose. This is a beautiful pink climbing rose. It makes an attractive hedge or may be trained over the veranda, as indicated in the above photograph. Photograph kindly sent us by H. D. Graham of Ohio.

substances. Because of this fact, such articles are powerful preservatives in the presence of which all decay becomes impossible.

The plain fact is that these chemicals kill germs and thus prevent decay because they poison the germs. This fact is well to bear in mind when suggestions for use of chemical preservatives are offered.

Such germ-killing chemicals are occasionally used through ignorance of their real nature. More frequently they are resorted to by dishonest people, who, by their use, are able to preserve and market foods not fit for human consumption.

Benzoate of soda and salicylic acid are the most frequently used of such poisonous preservatives.

#### SIMPLE CANNING METHODS.

To Can Peaches.—Peel peaches nicely remove seed by cutting pieces as large as will go into the cans, pack can full of fruit, fill crevices in cans with a syrup made of granulated sugar and rain water, wipe clean and dry and solder on caps by using capping steel, leave air hole in cap for air to escape, place in top tray of canner, have water in canner boiling, lower the tray of fruit into the boiling water leaving an inch of can above the water process five minutes, take out, make air tight, change to lower tray of canner, sink entirely below the water in canner and watch for bubbles of air from cans, if there is a bubble the can is not air tight, take out and make air tight, return to water and cook ten minutes, place in cool place.

Can pears the same as peaches. Exhaust five minutes and cook twelve minutes. Plums the same as pears.

Apples should be prepared the same as peaches, exhaust three minutes and cook fifteen minutes.

Strawberries.—Handle with care, fill cans first with berries then with syrup, exhaust three minutes and cook five minutes.

Dewberries and blackberries, same as strawberries, exhaust three minutes and cook seven minutes.

this spring with practically a clean platter.

It naturally follows that all vegetables and fruit crops grown, in 1912, will sell at a good price if steps are taken whereby these products may be conserved in a palatable form. That is, CONSERVE THE WASTE which occurs under average conditions on the American farm.

This can be done by placing these valuable products in glass or tin containers to be marketed when conditions are best or at the pleasure of the grower. This is especially advisable for those who are not close to a ready market for their fresh products and for that share of the crops which have to be sacrificed every year because of glutted markets, no matter where one is situated.

Great interest is being manifested, throughout the United States, in the Home Canning Business and if the public understood the matter better there would doubtless be an increased supply of all varieties of canned foods.

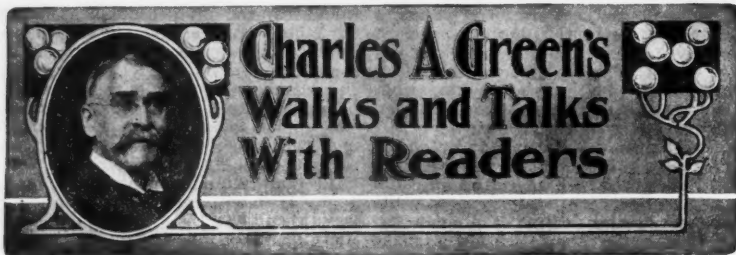
But someone asks, "Isn't the market for this class of food very likely to be quickly oversupplied?" This may be well answered by asking another question. Is there likely to be an overproduction of sugar or flour? These are recognized staple products but no more so than canned foods.

During 1911 there were seven hundred and twenty millions of cans of peas, sweet corn and tomatoes alone, canned and consumed. These brought a good stiff price and the demand is increasing every year as the public appreciates the convenience, economy, purity and palatability of this source of food supply.

These figures may seem stupendous but when we stop to consider the population of our country, the rapid rate of increase and the tendency to do away with as much housework as possible, you should be convinced that the consumption of canned food is hardly begun.

Now, brother farmer, trucker and orchardist, the writing is on the wall. We must do business on a safe basis if we





## Charles A. Green's Walks and Talks With Readers

"Think nothing done while aught remains to do" said Napoleon.

ROCHESTER, N. Y., JULY, 1912

**He Owns the Fruit Farm Still.**—Though C. A. Green was compelled owing to the growth of his business to leave his Fruit Farm for the city of Rochester, he still owns it and has not thought of selling. He and his family spend many happy weeks on this farm each season and visit it often. Mr. Green's book, "How I Made the Old Farm Pay," gives a full account of the planting of berry fields, vineyards and orchards on an ordinary grain farm and how he made the old farm pay. Price postpaid twenty-five cents.

Plant diseases and insects may be increased by continuously planting one crop upon the same field. Every crop has its peculiar insect enemies and it is natural to assume that these enemies will be more numerous the second, third or fourth year the same crop is grown upon the same land. The same is true of plant diseases. Every plant or tree has its peculiar diseases and the spores of these diseases are more likely to be found in the field occupied by the affected crop a second, third or fourth year, than the first year.

**Englishmen Planting Fruit in Canada.**—We are told that two noblemen born and bred in England have sold their estates in England and have bought land within twenty miles of Toronto, Canada, intending to grow there the apple, pear, plum and quince, and the strawberry, raspberry, blackberry, currant and gooseberry. They will bring their families with them and make Canada their home. Here is further indication that the people of Europe are coming to appreciate the fact that the United States and Canada are the greatest fruit growing sections of the world. While there is much fertile land in England, here is evidence that it is not so valuable for fruit growing as much of the land is on this side of the ocean.

**China.**—There are few in this country who appreciate the size and the importance of China, a country which has five hundred million inhabitants, or five times as large a population as that of the United States. While it is deficient in railroads it has over six thousand miles of railroad. It lacks highways as much as anything.

There was a time when China was the most aggressive country in the world. Printing had been discovered in China long before it was known elsewhere. The Chinese made use of gun-powder and made other inventions far ahead of other nations. The trouble with China has been that it has not been progressive during the present century. The prospects are now that China may become one of the most important nations of the earth.

**Work and Love.**—Mr. J. E. Johnson of Ohio writes the Editor of Green's Fruit Grower saying that the greatest word is Work, Work, Work, and that the next greatest word is Love, Love, Love. But he seems to think that Mr. Robert S. Walker of Tennessee and the Editor of Green's Fruit Grower do not know much about work or love. This is criticism that we were not looking for.

So far as working is concerned, I am satisfied that I am doing my share of the world's work and possibly more than my share. As regards love, Mr. Johnson's meaning is somewhat obscure, for there are many kinds of love. I love my wife, my family and the human race at large. I love the beautiful in art and nature. I love the Creator and all his attributes. Mr. Johnson's suggestions are good as regards work and love being among the greatest words of man.

**Worry Kills.**—Men and women are seldom killed with overwork. We are built to endure much work, particularly if the work is congenial. It is worry that kills. When we worry we become fretful and irritable. The human machine has slipped a gear. The machine is out of order and should not be used until it is put in order again. This may be done by stopping the worry. Work has accomplished much but worry never accomplished anything more than to break down and upset the human system. When you feel that you must worry the best thing to do is to strip yourself and go to bed and to sleep. When you wake up rested you

will find there is nothing to worry about, that all your anxiety is imaginary. Worry is caused by weariness of the brain. When the brain is weary a little thing will cause us to worry. Rest the brain and you will find that you have no cause to worry.

When we hear of peach orchards near Rochester which are not injured by the past severe winter and which promise abundant crops, my impression is that it will be discovered that these promising peach orchards are located near enough to Lake Ontario to be influenced by that large body of water, which moderates the temperature. Peach trees at my Rochester home six miles from Lake Ontario are killed back seriously and every bud is destroyed. But at Green's Fruit Farm, thirteen miles southwest of Rochester the peach trees are not seriously injured, which seems remarkable. Subscribers of Green's Fruit Grower in Ohio report that the peach trees there are seriously injured by the winter, not only in the bud but in the branches. If you find the bark turned dark you may rest assured that your peach trees are seriously damaged by the past winter, which has been one of the most severe of many years.

**These People Do Not Spray.**—Raymond E. Lytle of Washington Co., Pa., writes Green's Fruit Grower that orchardists of his neighborhood do not have to spray their apple trees for canker worm and codling moth. Their method is to watch the orchard and when they get a slight draft blowing toward or through the orchard they smoke the trees with old hay and straw, and while this is burning they sift sulphur, turpentine, pine tar and copperas over the hay and straw and it is thought to kill the insects named. The time this is done there is about Memorial Day and later until the eighth of June. The work is done when the trees are either dry or wet with dew or rain. He has found this to be a success and says it does not harm the birds or the bees like poisonous sprays. From his orchard of forty trees he had six hundred bushels of salable fruit after smoking them as above.

**Editor's Note:** I have no experience with this method, therefore cannot say anything for or against it.

### Coal Ashes For Roads And Walks.

Here is a product to be found on almost every farm or village lot, which should not go to waste. I find coal ashes useful in making roadways. They pack readily into a rocklike condition, bearing up heavy loads, and are almost as smooth as an asphalt pavement when properly graded. They also make good walks, but there is some objection to them for walks on account of the ashes clinging to shoes and being tracked into the house.

The walks and driveways of every home should be carefully looked after, for they are important features, adding much to the beauty of the place if kept in fine condition. The borders of the walks and driveways need trimming with a sharp spade several times each year. The work can be done at less than one-half the expense if done immediately after a rain when the sod and soil are loose and easily cut. Curved roadways, if well laid out, are always more attractive than straight roadways through the home grounds leading to the house or barns.

### Experience With Raspberries Winter Killing.

I have a row of red raspberries in my garden growing midway between several rows of asparagus. Each winter the asparagus plants are covered thickly with stable manure, and at the opening of spring the manure is scraped from either side of the asparagus row onto the row of raspberries, thus giving the raspberry row an unusual annual dressing of manure, and leaving the raspberry row thoroughly mulched during the growing season, which induces a marvelous growth of the canes of the raspberry. As may be supposed, this row of raspberries yielded marvelously for a few years, but finally the canes began to die back, being killed by the severity of the winter. But other rows of this same red raspberry not twenty feet distant, which were not heavily

fertilized with yard manure as was this row that winter killed, came through the winter in prime condition and have borne good crops each year.

Here is a lesson worth learning. It teaches that if you are located where the winters are severe it is not well to give the raspberry plants or other fruit plants or trees excessive fertility, for if you do, the manure will cause a rank growth which does not mature so early or so thoroughly as plants or trees less liberally fertilized. One cause of fruit trees winter killing on some of the western prairies where the soil is remarkably fertile is that the growth is excessive. One reason why plants and trees grown at Rochester, N. Y., are remarkably hardy is that the growth there is not so rapid or so succulent as that in many of the western or southern states.

### The Servant Girl Problem.

We have two important letters from wives who were once servant girls. These letters throw light on the servant girl problem. It does not take a hired girl or a hired man long to learn whether the employer and his wife and children are tender hearted and considerate, or whether they are harsh and inconsiderate of the happiness or feelings of the servant.

Some one chided a great man who in driving on a highway turned out widely for a heavily laden wagon.

"It was not your place to turn out," said a friend.

"No," replied the great man. "It was not my place to turn out, but I respected the burden on the other team."

While I read the above thought as a child, it has been with me throughout all the past years and I trust it will make an impression upon the reader. We should respect the burden no matter who carries it. Every hired girl, every hired man has burdens to carry. Let us respect these burdens and make them as light as possible. If all would do this the servant girl problem would be solved.

### Don't Know How to Spend Money.

Possibly you have not realized that not half the people of this country know how to spend money. We assume that everybody is economical, but the fact is that the most of humanity are not economical. Economy means the wise expenditure of money as well as the withholding of expenditure. Many people are too close or stingy to be economical in the broad sense.

My thought is turned in this direction from experience with a worthy individual who has no better home offered for the moment than the poorhouse. We are assisting this individual and some friends have contributed small sums, but we dare not place all the contributions into the hands of the recipient at one time because we know that if we do the money will not be wisely expended. There is a reason for everything but it is sometimes difficult to learn the cause or reason of things. If this individual to whom I refer had been an economist he or she, as the case may be, would not be an inmate of the poorhouse. There is no individual who has lived fifty or sixty years without having had some opportunity for saving at least a small sum of money, or of making money or of securing a permanent position, where his ability would bring its just reward.

### Rest and Recuperation for the Farmer And His Family.

How shall the farmer and his family take a much needed rest during the summer months? This is a sensible question and one that I should like to hear treated briefly by the readers of Green's Fruit Grower for publication.

Many of my friends have the past winter been spending several months in the south, usually in Florida. The expense of putting up at good hotels in the south is great. I recently met a laboring man, a friend, who said that he had spent the entire winter in Florida. "Why," said I, "How could you afford such a trip?" "It cost me but little more than my carfare," he replied, "for I camped out during my entire stay in the south. The weather in Florida is so mild in February, March and April one does not require a house. My expenses were trifling."

Here is a suggestion for the farmer and his family who do not care to be to the expense of stopping at a high-priced hotel by the lakeside or in the city. I would suggest to these friends that they hire a tent, which can always be secured from tent manufacturers in every city, and load up their utensils and supplies and have their man of all work drive them to some lake shore or river side near some resort, and near supplies in the way of groceries, etc., and spend a few weeks in this manner. They would possibly like to be near a city. Nearly all cities have rivers nearby. This family could camp out on the shores of the river within a short distance of the suburbs of the city and have the benefits of the city for a season, riding in and out by boat, or they could keep a horse and carriage near their tent.

As I ride out from Rochester, N. Y., along the shores of the Genesee river, I see numerous tents close to the shore of the river on either side, where people are camping and recuperating for a few weeks.

Some of the readers of Green's Fruit Grower instead of taking a vacation themselves are preparing to take summer boarders, thus enlarging their own work and furnishing a vacation for other people for a price. In many parts of New England, notably in New Hampshire, thousands of farmers increase their income in this manner, but if this summer boarding house system is likely to overtask the housewife and her daughters, it may be a very expensive experiment for the husband and father, who may in coming years have to pay out more for doctor's bills owing to overwork on the part of his family, than the profits would amount to from taking summer boarders.

### An Easy Way to Blast Rocks.

We are learning something every day. One reason why we are in advance of those who lived thousands of years ago is that we have profited by the mistakes of those who lived before our time and have continually been learning from experience how to get better results with less effort.

We used to think it necessary to drill holes in large rocks. In these deep holes, which often consumed nearly half a day's work for each hole, we would place gunpowder, which was exploded and which cracked the boulder but did not break it into pieces small enough to be easily removed. Often it required an entire day to blast and remove a big boulder by this old process.

Now it has been discovered that all that is necessary to break up big rocks is to place a stick of dynamite on top of the rock then place a few shovels of moist earth over the dynamite. The dynamite is connected with a fuse and the fuse connected with a wire, or longer fuse. One hundred fuses can be connected with the same wire if convenient or necessary. When the spark is attached, all of the rocks connected therewith are blown into pieces so small that they can be easily loaded onto a wagon. Even if the rocks are partially buried in the soil they will be broken by this method.

There is no excuse now for allowing our fields to be obstructed by large stones or rocks. If you are not experienced in handling dynamite I advise you to secure the services of an experienced man to do the blasting. This new method of blasting has been discovered by the men engaged in digging canals or improving our roadways. Old stone walls have been given for road improvement. In these old walls are large rocks which formerly were not used in road making, but were left where they stood, a continual menace and ever in the way. Now every rock in the old stone wall is blasted with dynamite crushed and used for road beds.

### The Waste of Life.

The one thing in this age of high prices which seems to be held cheaply is human life. Daily we hear of men risking their lives working at dizzy heights on frail platforms or iron girders with less than six inches foot space, or in sinking their lives in flying machines, or in sinking to the bottom of the ocean in submarine boats, or in traveling at seventy miles a minute in automobiles, or in wandering about the streets of a city unconscious of danger from passing motors.

But the great loss of human life occurs from chronic and acute diseases, which kill daily in this country nearly two thousand persons, or nearly a hundred every hour. While medical institutions have been endowed with millions of dollars by Rockefeller and others to stamp out disease and to study its cause, the death rate is constantly increasing from cancer, tuberculosis, kidney diseases, heart diseases and nervous disorders.

Every man, woman and child is worth a certain sum to the nation and this sum has been placed at four thousand dollars, which is a very low rate. But at four thousand dollars each the loss from the death of seventeen hundred people each day amounts to six million, eight hundred thousand dollars, which this country loses each day from the death of its citizens.

Undoubtedly a large portion of these deaths are preventable. Man has a strong hold on life as is being shown daily and hourly. Men have been known to live to old age with one lung, one kidney, with enlarged hearts and weak hearts, weak bodies and diseased bodies. The trouble seems to be that the American people consider wealth of greater value than health and strength. Most people are economical of their money but extravagant of health. Overwork, great anxiety, mental and physical strain, work in badly ventilated offices and factories, exposure from insufficient clothing, overindulgence, are the prime factors in filling our cemeteries.



Our Slogan is "Doubling the Yield of Our Crops Without Great Additional Cost."

Ponder over this slogan of Green's Fruit Grower. This has been our watchword throughout the years. The time has come when this condition of affairs must be brought about or this country will not, with its rapidly increasing population, be able to provide food for its people.

Remember that this is a new country, that our soil has not been cultivated one-tenth as long as it has in England and Scotland, and yet the land owners of England and Scotland are securing much larger yields, than we are getting in this country and often more than double the yield. Under proper management farm lands should not decrease in productiveness. On the other hand, it is possible to largely increase productiveness year by year for a life time.

The question arises, "How is European soil kept fertile after so many years of cultivation?"

First, by a system of rotation of crops. Every farmer should know that if he sows wheat continuously on the same field that the yield on that field will tend to be smaller each succeeding year under the same treatment, whereas if other crops are planted on this field, requiring different ingredients of fertility, large crops can continuously be produced if a proportionate quantity of fertility is added each year.

No one knows better than the nurseryman that certain crops exhaust the soil or render it incapable of producing successive crops of the same kind. The nurseryman has learned by long experience not to plant the same field to blocks of young apple trees where apple trees have been grown the few years previous. The nurseryman is ever seeking new soil for his products.

Some have held, and with good reason apparently, that certain crops poison the soil for the same crop in successive years. Perhaps "poison" is not the proper word to use but it expresses the thought or theory, for the rapid reduction of yield cannot be accounted for simply by the reason that a certain amount of fertility has been removed from the soil by the crop.

Remember that the soil of our farms and all farms has been in process of making or development for millions of years, and that the process of soil making is going on daily, unnoticeable to the most of us, as additional fertility is being added to the soil each year by the breaking up of its particles by the action of frost, which is as powerful in disintegrating as explosions of dynamite, and that additional fertility is added to the soil by the rains and snows, by the friction of cultivation and the admission of air through the drainage through tiles, and other methods.

Second, the saving and careful application of every available form of fertility. No country in the world is so wasteful of its fertility as the United States of America. Millions of dollars worth of fertility escapes to the rivers, lakes and harbors of the sea each year, which in Asia and many other parts of the world is carefully preserved and applied to the land. We of this country have inherited such a vast store of native fertility, our lands have been so rich and productive through the accumulation of ages of decay of vegetation, that we have dreamed such fertility would continue forever, but this has been our fatal mistake.

There was a time when the rich prairies of North Dakota were so fertile the farmers did not deem it necessary to save their barnyard manure, but allowed it to go to waste. While much of this Dakota land was the richest in the world, farmers there have learned that they have need of every particle of manure they can save and apply to the soil.

Third, increased productiveness can be secured by purchasing and feeding grain to sheep, swine and beef or dairy cattle. Many progressive farmers purchase carloads of live stock in the Chicago, Buffalo or other leading markets. They feed these cattle during the winter months and, though they may not make much profit on the live stock itself, are willing to take their profit in the large increase of fertility in the manure accumulating in their barnyards.

Fourth, commercial fertilizers must be relied upon to fill out the deficiency, since no one can expect to make enough barnyard manure to keep a farm in a high state of fertility. At Green's Fruit Farm we are continually buying additional land, some of which has been devoted to potatoes or other crops until it would no longer profitably produce such crops. Our first step is to buy many carloads of manure from neighboring cities, but since we cannot get enough of this manure we have to use commercial fertilizers freely.

Fifth, the use of lime is coming into more general practice as our country becomes older. We have a suspicion as to how lime adds to the productiveness of soil but do not know all there is to learn about lime as a fertilizer. Lime dis-

GREEN'S FRUIT GROWER

AN ILLUSTRATED MONTHLY JOURNAL

GREEN'S FRUIT GROWER CO., Publishers

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Entered at Rochester (N. Y.) Post Office as second class mail matter.

integrates clayey soil, loosens it and loosens its store of plant food, and also sweetens the soil. It is not difficult to learn whether your soil is acid through the use of litmus paper.

Sixth, the loss of plant food now in the soil is prevented by draining the soil, which lessens the washing of the surface down the slopes into the valleys and into the swamps or woodlands. The farmer who is intent on building up his land seldom sells his hay or straw, and never would sell a load of clover hay, for that

of the passengers, was worth one hundred and fifty million dollars. He had \$3,450 in cash in his pocket, and his wife had millions of dollars worth of jewels. One of the small lifeboats on the Titanic could have been built for fifty dollars, but if Colonel Astor had offered his one hundred and fifty million dollars in New York real estate and all his jewels and other wealth in exchange for this fifty dollar lifeboat his offer would have been refused. Here is an instance where money, no matter how large the amount, was absolutely



The above photograph by W. B. Pray of N. H. shows the rocky nature of the country in some parts of northern New Hampshire. It has been said that if the early emigrants to America had first landed on the Pacific Coast they would have never attempted to clear up the rocky and stumpy soil of New England. I can think of no better use to be made of such rocky soil than to plant it to fruit trees. The rocks will not interfere with the growth of the trees but would help growth rather than otherwise. Tree planting in such rocky ground would necessitate extra labor in digging out wild trees that might spring up there, and in the hand cultivation necessary in cultivating a space of two or three feet in size around each tree for four or five years. I have known orchards planted in rocky soil where the land could not be cultivated to yield much good fruit.

contains more plant food than most other fodder plants.

While we must rely upon applying fertility continuously in order to secure larger crops, much can be done by giving more thorough and intelligent cultivation. A farm poorly plowed cannot be fitted for a crop, no matter how much after work may be done. If cultivation is not given at the proper time it is not possible to subdue the grass and weeds that spring up. Timely cultivation is in a sense adding fertility to the land.

Do not forget that tons of fertility exist in the air over almost every farm in the way of nitrogen, and that it is possible to entrap some of this fertility in the form of snow or rain and from the roots of clover and other leguminous plants.

Money Cannot Save.

Wealth is considered all powerful. It will indeed accomplish much for good or evil. Money represents industry, that is day's works done by somebody. The owner of money may not have performed the labor himself which his wealth represents, but his father or some other person did labor for every dollar laid by. If I have fifteen hundred dollars I can command the labor of a thousand men for one day. Think of the number of days' works I can command if I possess one hundred and fifty million dollars.

The Titanic steamship itself and its wealth of money, jewels, bonds and freight must have been valued at twenty-five million dollars, but the moment the steamship struck the iceberg all that wealth was without avail and was practically made useless. Colonel Astor, one

without avail, and Colonel Astor was as hopelessly doomed to death as the poorest person in the steerage of the sinking steamship.

Money will not restore health, will not bring true friends, will not bring happiness, will not make us at peace with the Creator. Money will, however, enable us to preserve or restore health if properly used, or will enable us to take needed rest and to move to a healthful climate. Let us realize the value of money and at the same time realize how weak money is under certain circumstances.

Remembrance of Perfume.

Some things make a deeper impression upon the mind than others. Perfumes make a lasting impression.

When I was a child on the homestead farm where I was born, I used to play under the shade of a tree by an open window which led up from a basement kitchen. I can remember as distinctly as though it happened yesterday how the scent of roasting coffee from the kitchen stove was wafted up to my nostrils through this basement window so many, many years ago. In those good old days we did not buy our coffee roasted and ground as we do today. The housewife bought the coffee as it came from the plantation and roasted it in an iron dish over the cook stove.

I can recall nearly as vividly the fragrance of the long pendulous blossoms of the honey locust and the fragrance of the apple orchard when in bloom, and the delicate perfume of the new mown hay.

Essence of peppermint is one of the medicines I keep continuously in my medi-

cine chest. Whenever I smell the unctuous peppermint I am wafted back to the old cobblestone schoolhouse near the farmhouse where I was born, where I attended school so many years as a child. There were large beds of peppermint and spearmint on the low land of the schoolhouse.

The scent of wintergreen is enticing, but to me it is particularly so, for it carries me back to childhood days when large numbers of the children of the country school took long tramps into the low lands where wintergreens flourished.

Then there is the fragrance of the wild strawberry, which far exceeds that of cultivated varieties. How often I recall in the fragrance of my own strawberry beds, that of the wild strawberries growing in the meadows of the long ago. I know on one occasion we children were cutting across lots, as is the way of school children, when something particularly enticing was wafted across the air in front of us. We recognized this fragrance as coming from the wild strawberry. Following the scent much as a dog would follow the trail of a bird or a deer, we came upon beds of the wild strawberry hidden among the tall grass, each berry dead ripe, already to drop into our hungry mouths.

Then there is the lilac, that old fashioned flower unexcelled today for its beauty, hardness and fragrance, which every farmer's boy of long ago so vividly recalls. I see the lilac now growing close to the foundation wall of the old farmhouse. It needed no petting or other encouragement, yet every spring how fresh and green was its foliage, and how beautiful and unobtrusive were its blossoms. The old farmhouse has been torn down and a new one has been erected in its place, but where is the lilac of my childhood.

A friend says that whenever she smells camphor she thinks of her grandmother, who made much of this old fashioned medicine and ever kept a bottle ready for emergencies. Whenever she eats cinnamon she is also reminded of this good grandmother, who in putting up her preserves or pickles used cinnamon plentifully and kept a reserve supply for her grandchildren to eat when they came to visit her.

The Ten Commandments of Spraying.

1. Do the work thoroughly. Fill every blossom and crevice. Cover every leaf and twig.
2. Do the work in season. Do not wait until too late.
3. Keep up high pressure. 120 lbs. per sq. in. will do, but 175 lbs. is better.
4. Spray from above, below and the sides sending the spray all through the tree.
5. Use a good sprayer and save trouble, time and expense. See that the working parts are lined with brass.
6. Keep the agitator going constantly.
7. Be sure that the material is properly prepared.
8. Dissolve all the solids separately and strain well before using.
9. Use plenty of fresh stone lime to take up the free poisons and prevent injury to the leaves.

OUTDOOR LIFE.

Will not Offset the Ill Effects of Coffee and Tea When One Cannot Digest Them.

A farmer says:

"For ten years or more I suffered from dyspepsia and stomach trouble, caused by the use of coffee (Tea contains caffeine, the same drug found in coffee) until I got so bad I had to give up coffee entirely and almost give up eating. There were times when I could eat only boiled milk and bread; and when I went to the field to work I had to take some bread and butter along to give me strength.

"I doctored steady and took almost everything I could get for my stomach in the way of medicine but if I got any better it only lasted a little while. I was almost a walking skeleton.

"One day I read an ad for Postum and told my wife I would try it, and as to the following facts I will make affidavit before any judge:

"I quit coffee entirely and used Postum in its place. I have regained my health entirely and can eat anything that is cooked to eat. I have increased in weight until now I weigh more than I ever did. I have not taken any medicine for my stomach since I began using Postum.

"My family would stick to coffee at first, but they saw the effects it had on me and when they were feeling bad they began to use Postum, one at a time, until now we all use Postum." Name given by Postum Co., Battle Creek, Mich.

Ten days' trial of Postum in place of coffee proves the truth, an easy and pleasant way.

Read the little book, "The Road to Wellville," in pkgs. "There's a reason."

Ever read the above letter? A new one appears from time to time. They are genuine, true, and full of human interest.





## Fruit Helps

By Prof. H. E. Van Deman,  
Associate Editor.

### SUGGESTIONS ABOUT CANNING.

It is one thing to grow fruits and other farm crops and another and even a more serious matter to get what they are worth in the market or in the consumer's hands, less the legitimate cost of getting them there. It is commonly stated that the producer usually gets about 35 cents of the consumer's dollar. That is far too small a share. One of the reasons for though this is, the perishable condition of much that the countryman has to sell. It must be sold, because it will not keep. To be able to keep the fruits and vegetables until the purchaser is in need of them would be a great advantage to both producer and consumer. This can be done with considerable success in many cases by drying and canning. The time is at hand when this work, especially canning, must be done and some suggestions about canning that can be used may be helpful.

#### MODERN APPLIANCES.

There are many large factories in all parts of the country where canning is done on a large scale and in them is to be found the most modern inventions. There are several manufacturers of smaller canning machinery, such as may be used on the farm. All of these different kinds of "home canners," as they are commonly called, have their good qualities and it would be well for anyone who is thinking of getting a canner to study into the peculiarities of each before deciding which is the better. It may be thought that these canning machines are too costly for use on the farm but this is a mistake, for many of them are sold at very moderate cost and range in size and capacity to suit the needs of almost everyone. The old style of canning over the kitchen stove is very disagreeable and slow and these modern conveniences for putting up the home supply of fruits and vegetables should be adopted. Their advertisements are to be found in nearly all the rural papers and if bought and put into operation they will not only lessen the annual task of putting up fruit for family use but enable the fruit and vegetable growers to save quantities of good stuff that would otherwise be lost. I have known several very humble attempts to use the small sized canners for home work only to develop into profitable business operations. By several neighbors uniting in the purchase and installment of a canning outfit of small factory size they can often cheapen the cost to each and have the work done better than by operating the smaller outfits on the farms separately.

#### THE HOME SUPPLY.

The first effort of those who live in the country should be to have an abundance of fresh fruits and vegetables the year round but this is not always possible. In cities where large markets are at hand there are better opportunities for getting things of this kind out of season than can be had on the farms, although the cost is apt to be high. But with the help of the modern canners there need be no scarcity of such succulent food as the appetite may crave and the physical nature requires.

No country home is complete in its equipment without a bountiful supply of canned as well as fresh fruits and vegetables and before any thought is given to making money out of such things the family stores should be abundantly supplied. Although that which is fresh and unchanged from its natural condition is the most palatable and wholesome that which has been properly canned is almost as good and can be kept for use at any time.

The common practice is to store up only canned fruits but there are several vegetables that may be canned with success even with the cheapest canning outfits offered for sale. Green beans, tomatoes, okra, asparagus and rhubarb are among the easiest to can but peas and corn require far more time and heat. These things would be a material addition to the supply for winter use and ought to be provided.

#### PRIME CONDITION NECESSARY.

The first requisite after getting a good outfit, including a liberal supply of cans, both of tin and glass, is that the fruit and vegetables be in prime condition. That which is not mature enough is lacking in flavor and nutrition and that which is past its prime is very liable to ferment and become unfit to eat if not really poisonous. That which is not fit to eat before it is canned surely will be worse afterwards. Fruit does not have to be beginning to decay to be unfit to can, be-

cause simple over-maturity is disqualifying. It must be ripe and yet sound. It is better to err a little towards unripeness than overripeness.

#### STERILIZATION.

There are myriads of germs of decay in the air, ready to attack every organic thing and it is important to have as few as possible in the fruit. They require certain conditions of moisture and warmth for their development and if these are present they will develop whether exposed to the air or not, which is contrary to old beliefs, prior to the discovery of the germs and their nature by the microscope. Heat will do this completely if properly applied. We now know that some kinds will develop and multiply inside of cans, bottles, etc., that are sealed air tight and this makes it absolutely necessary to destroy every germ. They will cause fermentation, gas, mold and rot, owing to their peculiar natures and the substances worked upon, for they are the germs of bacteria, yeasts, molds, etc., and each has its office to perform. It requires more time and different degrees of heat to kill some of them than others, for they are more resistant, but the boiling point of water at sea level, 212 F., will destroy the most of them and 165 to 180 will usually do it equally well. There are usually several kinds of germs present in or about all organic matter, such as fruits and other foods, and the treatment that will kill one may not another. Steam heat is used in all large canning factories and some of the home canning outfits are made so that it can be used but the intense heat often destroys the texture and natural flavors which is to be avoided, if possible. Therefore, whenever the lower temperatures will do the sterilizing effectively they should be used.

It has been found by a series of experiments at the Oregon Experiment Station that by two or three heatings at intervals of a day or two, at 165 F., there will be no living germs left and hence no spoiled fruit or vegetables. About 15 minutes duration of each heating is sufficient. The reason for this method is, that some species of fungi give off propagating spores that are not killed at the same temperature that kills their cellular tissues and by allowing these spores a day or two to germinate and then reheating the cans at first the fungi will be killed. Two heatings are usually sufficient but three are sure to be so. Corn and peas require a much higher temperature and cannot be safely canned by this method. The vital point in all canning is, that the sterilizing must be complete or trouble is sure to follow. Swelled cans are apt to have ptomaine poisons in their contents and should be destroyed.

And not only should the whatever is put up for food be sterilized but the cans, rubber rings, tops, pans, spoons, cloths and all that is used in doing the work. The naked hands should come in contact as little as possible with whatever is ready to be put in the cans and the parts of the implements that touch it.

#### PREPARATION OF THE MATERIAL.

All fruit and vegetables to be used should be gathered as near to the time of doing the canning as possible. If anything must be over night, as is often the case, it should be kept as cool as possible and in a clean place as well. The place where the preparation for the cans should be exceptionally clean. Outdoor sheds are often used and if so they should be occasionally sprayed or sprinkled to lay all dust. Plenty of cold and hot water should be at hand at all times. The fruits and vegetables must be sorted over with extreme care that none that is not fit may get into the paring or scalding vessels and specks of dust, sand or other things removed by immersing in water. Berries are easily washed by first putting them in a wire basket, dipping in the water and leaving to drain. With a damp cloth wipe that which is to be pared. There are little nippers for removing the stems of berries better than by the fingers alone. Cherries are quickly stoned by a small machine.

Peaches and apples are easily pared on special machines but pears and quinces are of such shape as to require a knife in the hands of a skillful person. Some prefer to halve peaches before paring them and this usually leaves the pieces in better condition than to pare them first. The seeds of cling peaches are easily cut out with a narrow, pointed knife and there is a curved tool made for this purpose

that may be bought. As pared fruit is discolored in the air there should be only enough prepared ahead of the canning to keep things going. Tomatoes are peeled after scalding in very hot water for about one minute. Peaches and plums are sometimes peeled in the same way, but require about three minutes to scald sufficiently. They should be plunged in cold water, wire basket and all, for about a minute to cool before peeling.

There are two ways of canning in general use. One is to put the fruit or vegetables in the cans and heat the contents in them and the other is, to heat it to the boiling point in kettles and fill the cans afterwards. By the former plan there is almost no mashing of the contents and for anything more than a small batch it is to be preferred. There are also two ways of treating the fruit, one is to use sugar and the other to put it in plain or unsweetened. For home use it is decidedly preferable to sweeten it at the time of canning, because it permeates the entire contents alike. It is a common practice to put the sugar in a preserving kettle with the fruit and guess at the amount needed but a better way is to make a definitely proportioned sirup and add an exact quantity to each can of fruit. To determine this a sirup gauge or saccharometer is needed. This is a very simple instrument that can be had of any good dealer in chemical apparatus or any merchant can get it if the such dealer is not convenient. It is a graded glass tube that indicates the density or richness of the sugar content of any sirup. That this may be easily seen there is a narrow glass cylinder used to put a sample of the sirup in to gauge it by the insertion of the graduated instrument. The cost of the two will be about 75 cents. A solution that will read 14 degrees on the gauge is about right for the ordinary fruits. This is equal to two measures of water to one of sugar. The cans should be filled as compactly as is possible with the raw fruit and the quantity of sirup added that will fill all the intervening space.

In case glass cans are used they should be put in a deep vessel, such as a wash boiler with a board in the bottom cut to fit, and cold water filled in almost to the top of the cans and brought to the boiling point and kept there for about 20 minutes. The jars are then taken out with tongs made for the purpose, the tops put on and fastened tight. When partly cool they should be examined and the tops fastened tighter if possible. The tops and rubber washers should both be scalded before putting them on.

Tin cans are filled in the same way and the caps soldered while yet cold, when they are ready for boiling. They being a small hole in the center of each cap for the hot air to escape while boiling the cans are set in water nearly to their tops and left so for about ten minutes, when they are taken out wiped dry on top and the holes closed with a touch of the soldering iron. They are then ready for the final boiling which should be in water which completely covers them and continue for 20 minutes. The cans are then ready for labeling and storing. All that are to be sold should have neatly printed labels pasted on them and those that are to be used at home should have the names and dates on the cans in plain letters. Canned vegetables are treated the same way, except that salt may be added instead of sugar, or, the salt may be omitted, as is usually done with tomatoes. The salt is added in the dry state, so much to each can, according to the needs of the vegetables used. An ounce of salt is about right for a dozen 2 pound cans.

#### STORING CANNED GOODS.

The proper kind of place to keep canned fruit, etc., is one that is cool, dark and dry. Warmth and moisture induce mold and musty smells and while they cannot enter the cans there is less chance of any internal changes taking place if the temperature of the storeroom is low and uniform. Light has considerable influence on such things as are in glass and should be excluded. Farmer's Bulletins 203 and 426 of the U. S. Department of Agriculture at Washington D. C. treat the canning problem and can be had of the Secretary of Agriculture for the asking. They contain excellent suggestions and reliable information.—H. E. Van Deman.

## Answers to Inquiries.

Dear Sir:—Have you had any experience in trying to keep ice in common ashes? When a person throws their ashes out on the snow and then try to move them sometimes as late as May, you will find them still frozen and full of snow.

So I thought if they were packed around the ice in the ice house they would surely keep it.—A. P. Hart, Ill.

Reply: Ashes of any kind are porous and non-conductive of heat in some measure and would serve to keep ice but they are no better than sawdust and would cost more than ten times as much to get. The best place for ashes is in the soil about the fruit trees or almost anywhere that the soil needs plant food for they contain

potash and phosphorus, which are two of the valuable manures.

Where is the good, rich soil located in Florida, and how much is there of it?—Subscriber.

Reply: There is a great conflict of opinions in the public mind about Florida land. Some of the land boomers claim and say that it is "marvelously rich" that "the future of its development will be like the tales of the Arabian Knights" and other equally big talk. This is misleading to northern people, for they nearly all have lived and worked with clay soil and where there is no need whatever for manuring it for several years after being cleared of the native forest or the prairie sod having been broken. I have had these experiences from childhood myself and know from having farmed in Ohio, Kansas and elsewhere the real facts. I have also experience in growing fruit in Florida and have made observations nearly all over the state. While in comparison with the clay lands of the north those sandy lands on which nothing much but pine trees grow, naturally they are poor, but they can be made fertile by continued and abundant manuring. They are easily worked and yield readily to good treatment but to be called rich, that is, naturally rich, it is not true and any such statements will bring disappointment and finally work against Florida land instead of in its favor. That is what congressman Clark of that State was trying to prevent by having the Everglade frauds brought to light. There are some soils in Florida that are fairly fertile, naturally, but they are not very often found, nor do they cover large areas, as I have seen them. They are known as "hammock" lands and have a native growth, oak, hickory, cabbage palm and many vines and bushes. The Annattaloga Hammock in Hernando county is of this character and covers about 60,000 acres. I own a small tract of land there and have carefully inspected it. Crops can be grown there at the start, so I was told, without the use of fertilizers, which is a wonder in Florida, for all of the pine lands must have fertilizers applied the first year the land is cleared or nothing of much value can be grown. This I know from costly experience in Dade County and the same is true elsewhere. Where clay lies below and can be reached by the plow the land is much better, as is found in some sections, especially in western Florida.

I am a friend to Florida (and everywhere that people can live) and I want to see its genuine prosperity and that can not be attained by any kind of misrepresentations. That is why I have tried to tell the plain facts and have been blamed by some for doing it. It is better to have a fair understanding of the facts than the opposite. The Everglade boomers are showing northern people the black muck and telling them it is rich, and so it is in humus and, to some extent in nitrogen but in potash and phosphorus it is poor and these are two of the principal plant foods. If clay and not rock sand or marl was below and could be brought by the plow and mixed with the sandy surface, as is the case in some part of the State, there would be far more hopes of making a good soil that would last. I hope the Everglades will be drained and made into a prosperous region but it cannot be done by misrepresentations of the facts as they really exist. One man who wants to grow berries I discouraged in the last issue, for only strawberries can be grown in Florida.

The climate is mild and very delightful in winter but the summers are quite long and hot. One can live on home grown vegetables the year round and have good health. Poultry can be kept with profit, but about all grains fed will have to be bought except where corn and oats may be grown at moderate cost, and that is only in a few places. This is true of keeping cows for milk and butter. The wild pasture is fairly good and very abundant in nearly all parts of the State.

Alfalfa.—I do not get many inquiries about alfalfa, which leads me to think that farmers of the eastern and middle states have not given alfalfa much attention. Is alfalfa adapted to the middle and eastern states and should it be more largely grown there?—Reader.

Reply: Alfalfa is one of the best of all forage plants, both for the land and for stock food. It requires a certain species of bacteria on the roots to cause the plants to grow and this is not present in all soils but must be applied in soil that comes from a field where alfalfa or sweet clover (melilotus) is growing well. The same bacteria live on the roots of these two plants. It is good for orchards if cut down and the hay allowed to rot on the ground. Alfalfa or any of the clovers should be plowed under after standing two or three years.

(Additional Answers on page 17.)



### Mulching Fruit.

Written for Green's Fruit Grower  
By our Regular Contributor, Prof. H. E.  
Van Deman, Late United States Pomolo-  
gist.

It is perhaps a common belief that mulching is one of the inventions of man, to aid him in the culture of various things; but this is not so; for it is one of nature's own methods. She has practised it from the foundation of the world. Long before man appeared upon the scene, the roots of forest trees and almost all kinds of vegetation were thoroughly mulched with their own leaves, twigs and decaying trunks. This provision of nature keeps the growth at its highest possible rate, for the three following reasons:

First. The mulch prevents the escape of moisture deposited by rains and snows, except as it is absorbed and exhaled by the trees and plants. The coating of leaves, etc., retain a considerable quantity of water, but the underlying stratum of leaf mould perpetually blends with the more solid particles of the earth, thus forming soil, which is sponge-like in character, and acts as a reservoir from which the thirsty rootlets constantly satisfy their wants. If it were not for the protection of the coating of leaves, etc., the earth would receive the full force of the falling rain and hail. In the course of a year, the weight of the strokes thus given upon an acre, where the rainfall is average, will amount to many thousands of tons. This compacts the soil and makes it less retentive of water, as anyone knows who has dug with his hands for wild plants in forests, and then in old fields or prairies.

Second. Mulching, as done by nature, keeps the roots cool in summer and warm in winter. Moderate warmth is needed for their free action, but with few exceptions they should be kept at a much lower temperature than the other parts of the tree or plant during the growing season. During the stages of severe freezing which have to be endured by a large part of our trees and shrubs, both wild and cultivated, the roots need all the warmth that can be kept in the soil. These moderations of temperature are more easily maintained by the nonconductive covering furnished by nature than in any other way.

Third. Mulching enriches the soil. The gradual decay of leaves and other trash adds constantly, both humus and mineral manures in available form. Humus is a most important factor in plant nutrition, and is never omitted by nature in the growth of such trees and plants as have their roots in the soil. It aids in the collection and retention of nitrogen which is absorbed from the air. All the potash and phosphoric acid which have been stored in the dead and decaying wood, seeds, leaves, etc., is ready for immediate use again by succeeding generations.

Thus we see how nature provides for the prosperity of her vegetation. It may be truly said that over a large part of the earth's surface almost her sole method is, culture by mulching, if culture of any kind may be said to apply to nature.

When we put trees into orchards and vines and bushes into plantations suitable to the purposes of civilization, it becomes necessary to adopt methods of culture which are convenient and capable of producing profitable crops of fruit. Usually we substitute a coating of mellow soil for the mulch which nature provided. This, if kept in proper condition during the whole year, and especially while the season of growth and rapid evaporation continues will in a measure retain the moisture, and keep vegetation in normal condition.

But there are many cases in which mulching with various trashy substances can be employed with ease and decided advantage. The dryer the climate and the hotter the sunshine the greater the necessity. There are many kinds of berries that will not flourish, and some will die outright, if their roots are left exposed to the heat and light, as they must be when covered only with ordinary soil. We see them struggling for existence in soil that we think ought to be just right for them. How well we remember the large and luscious blackberries we have gathered from giant canes that grew on the northside of some old rotten log where nature had mulched them a foot deep. The contrast between these and others that are set where the sun has full power to heat and dry the soil about their roots, is easily understood when we think of their different conditions.

Although there is more necessity for mulching in summer time, it does material good in fall and winter. This I have found by experience to be especially true in the Central and Western States, where there is often little rain or melted snow during that time of year. If the roots are well supplied with water there will be little danger of winter killing in this country except from Nebraska northward, where the winters are very severe. In those regions, it becomes necessary to lay down and cover with earth, grape vines and nearly all bush fruits, to prevent evaporation of the water in their sap. If the

soil was kept well mulched there would be much less complaint of the tenderness of varieties of fruits all over the country. There is often more cause for blame for failures resting on the fruit grower, than on the varieties.

But when the bushes are loaded with growing fruit is the time of greatest need for mulching. I have often saved crops of all the leading kinds of berries by covering the ground with mulch. When the fruit is ripening and large quantities of water are needed to perfect it, the benefit is most plainly seen. This simple protection often makes up the entire difference between crop of little starved, bitter, seedy berries and large and luscious ones.

The richer in manurial value the material used, the better it is, as a rule. Coarse stable manure is very good, but is apt to contain weed and grass seeds which will prove very troublesome. Clean straw, marsh or prairie hay, pine leaves or any forest leaves are all quite free from this fault and serve a good purpose. Along the sea coasts it is sometimes practicable to get kelp, or "sea-grass," which is very good for mulching. Cotton seed hulls are obtainable in the Southern states, and I have there seen whole cotton seed used in this way to most excellent effect. Almost anything that will cover the ground with a coating of vegetable tissue will answer the purpose. Sawdust I have tried, however, with bad results in some cases, as it did not decay readily, and seemed to foster the white grub. Spark tanbark is liked by some, but I have never tried it.

One thing must be remembered most carefully,—that mulching will induce the growth of roots at the surface of the

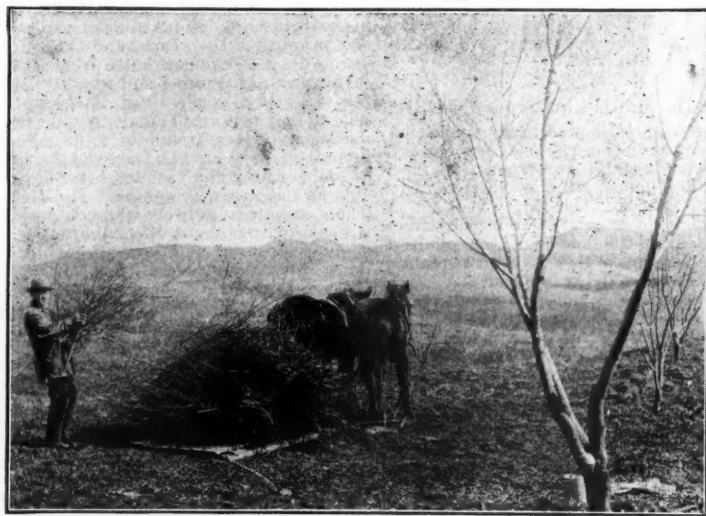
either method. It takes but little time to go over a long row of currant bushes. The currant is so popular with housekeepers that it should be preserved if possible. Whale oil-soap is also destructive to the worms but is less pleasant to use than the hellebore. The latter is a fine powder and is kept by all druggists.

### Fruit Instead of Grain.

Much more food can be grown on an acre devoted to fruit than can be produced with any kind of grain. Fruit growing also provides a greater amount of work and requires a larger number of helpers. To the extent that fruit growing is substituted for grain growing there will naturally be an increase of country farming population. This is what is the most needed to make land valuable. The growing of grain makes the land poorer, especially where the grain is sold. Where fruit is grown the chief loss to the soil is in the mineral elements, and the sale of the fruit brings money to purchase these. Selling grain never returns enough to restore the fertility expended in growing it.

### The Lawrence Pear.

Many Eastern pomologists are fond of building up their faith with Beurre d'Anjou for their corner stone. While nothing can be said against this excellent variety, as time goes by, the impression of many growers in this part of the country is that the Lawrence is second to none for the purpose. It would be a loss to be bound down to but two or three kind of pears, and no one here would like to be without the Bartlett and the Seckel in



One method of drawing off brush after pruning the orchard. Brush should not be allowed to remain in the orchard after it has been removed from the trees for various reasons. If the brush is left there it encourages the presence of mice and insects. At Green's Fruit Farm they usually draw off the brush with a wagon and hayrack.

ground, and if it is ever expected to plow where the mulching is put, these roots will be destroyed. This is often very damaging to fruit trees and grape vines, which are, of course, expected to remain undisturbed for many years.—H. E. Van Deman, June, 1895.

The fruit growing possibilities of this country are so great and as yet so slightly tested, and the successes that have been achieved even on the largest scale have been so largely matters of accident or surprise, that the limits of the fruit-growing districts, and even of the principal fields of production, cannot yet be regarded as finally determined; and such unusual climatic conditions as those of last spring and summer and the present winter may not only materially affect the sources of our supply, but may teach new lessons of experience as to the localities in which the best results are to be obtained.

The Ohio Experiment Station, has been making experiments to determine whether honey bees are injured by spraying fruit trees with the arsenites while they are in bloom. These tests seem to show conclusively that bees are killed in this way. Apart from the destruction of the bees and the consequent loss to the apiarist, this would seem to be a bad policy for the fruit grower, since the presence of bees is acknowledged to be of great value in securing a crop of fruit by their work in pollinating the flowers.—Garden and Forest.

### Hellebore for Currant Worms.

Hellebore is one of the remedies for destroying the currant worms or caterpillars that we have ever found. If taken in time it will save the state crop. It can be dusted on from a flour dredger when the bushes are wet with a recent shower or with dew, or it can be well mixed with water and applied with a sprinkler or garden syringe. Satisfactory results will follow, if taken in time, from

### Pie Plant.

Rhubarb fills a distinct want, coming as it does at a season when nature craves green food, while its acidity stimulates the languid appetite. It is surprising that it is not more generally grown. Only a few plants are necessary for a family supply, and, once established, little labor is thereafter required.

Rhubarb roots should be set out early in a rich and well manured soil. The plant has no insect enemies, and is subject to no diseases. The stalk is always clean and perfect and responds to good culture by producing an abundance of fat stalks for years. When the plant begins to show signs of failing, they should be taken up, divided and reset into a permanent patch.

### The Peanut Not a Nut.

The department of agriculture has decided that the peanut is not a nut, and that "the weight of authority seems to be in favor of accepting it as a native of Brazil." The peanut of the north is known in the south, where it is commonly grown, as the gopher pea.—Exchange.

### Friendly Birds and Insects in the Garden.

We should learn to distinguish between foes and friends in the garden, and if necessary the children should be taught early the difference between insects and birds that do harm to plants and those that do good. Snakes, toads and lizards, instead of being injurious to plants, are always invaluable helps in keeping down injurious insects. Snakes may be repulsive in appearance, and poisonous ones very dangerous, but the ordinary garden snakes will not hurt one, and they will keep down mice, bugs and insects as nothing else can. As a rule, the noxious insects are in the greatest numbers in our gardens, and hence toads, lizards and snakes that eat all that come near them destroy more of the foes than friends. I should never think of killing one of these creatures in the garden, but would be more inclined to protect them, and even to import them into the garden. I have seen a small gray lizard clean off the worms from a field of cabbages as fast as they could multiply. Attracted by the fat feast, the lizard returned every day, and he would make trips up and down the rows of cabbages until not a worm could be found.

A few toads in hotbeds and cold frames are of inestimable value. They will keep down all insects that begin to show themselves, finding them under leaves and stalks that hide them from an ordinary observer. In Paris toads are regularly caught and sold to gardeners for insect hunting in their greenhouses. And yet many boys and older people destroy them ruthlessly as soon as they discover them in the garden. The toads will eat cut worms by the wholesale, if they can find them, and I have seen them devour potato bugs in great numbers when deprived of more palatable food.

### DOCTOR'S SHIFT.

#### Now Gets Along Without It.

A physician says: "Until last fall I used to eat meat for my breakfast and suffered with indigestion until the meat had passed from the stomach."

"Last fall I began the use of Grape-Nuts for breakfast and very soon found I could do without meat, for my body got all the nourishment necessary from the Grape-Nuts and since then I have not had any indigestion and am feeling better and have increased in weight."

"Since finding the benefit I derived from Grape-Nuts I have prescribed the food for all my patients suffering from indigestion or over-feeding and also for those recovering from disease where I want a food easy to take and certain to digest and which will not overtax the stomach."

"I always find the results I look for when I prescribe Grape-Nuts. For ethical reasons please omit my name." Name given by mail by Postum Co., Battle Creek, Mich.

The reason for the wonderful amount of nutriment, and the easy digestion of Grape-Nuts is not hard to find.

In the first place, the starchy part of the wheat and barley goes through various processes of cooking, to perfectly change the starch into dextrose or grape-sugar, in which state it is ready to be easily absorbed by the blood.

The parts in the wheat and barley which Nature can make use of for rebuilding brain and nerve centres are retained in this remarkable food, and thus the human body is supplied with the powerful strength producers, so easily noticed after one has eaten Grape-Nuts each day for a week or 10 days.

"There's a reason," and it is explained in the little book, "The Road to Wellville," in pkgs.

Ever read the above letter? A new one appears from time to time. They are genuine, true, and full of human interest.

the garden, but where marketing or preserving is in question, it is safe to say the Lawrence is unsurpassed for profit. The tree is not so rampant a grower as some others, but then it is hardy and healthy, and a most prolific bearer. By a little care one can have the fruit to eat all winter. Left to itself it ripens about the time of the first frosts here, the early part of November. But some can be gathered earlier than this and ripened indoors. When all are picked and stored indoors, they ripen one after another for a period of a couple of months. There are really but few good winter pears, which is what makes this of so much value. There is one way in which this fine pear can be had, not only all winter, but all the next summer too, and this is by canning it. It is one of the very best of them all for this purpose, possessing a flavor which suits the taste of almost every one. If a half dozen pears are to be planted, let one of them without fail be a Lawrence.

### Fruit Trees by the Roadside.

A correspondent, James H. Taylor writes us recommending the planting of fruit trees for shade along country roads. He suggests that the owner of a row of maple trees gets no fruit from them, and that he might plant fruit trees in the same spirit, letting travelers have what they desired as they passed along. It is not uncommon to meet with a nice apple, pear and cherry tree now along country roads, but in the vicinity of cities, where boys are numerous, they play havoc with such trees.

The spider is so well supplied with the silky thread with which it makes its web that an experimenter once drew out of the body of a single specimen 3,480 yards of the thread—a length but little short of two miles. A fabric woven of spider's thread is more glossy than that from the silkworm's product, and is of a beautiful golden color.





**Asparagus.**—Two year asparagus roots carefully planted in late May 1911 is furnishing our table with lots of good cuttings this spring.

The currant crop should be a banner one judging from the fields as seen now, May 23rd. Also the strawberry fields never looked better and more promising.—E. H. Burson.

**The Diploma Currant.**—Sets its fruit here fully one week later than Presdt, Wilder and Fays, and this we consider a added good point of the good new variety as there is a chance of missing some late frosts.

**Peaches.**—All varieties, cherries blossoming full, pears and plums generally full. Peaches, the hardier varieties such as Crosby, Greensboro and Rivers blossomed full more tender in bud varieties, blooms scattering. Apples summer and fall varieties generally full, Baldwin not making so good a show.

#### Watering Strawberries.

I have tried to water fields of strawberry plants with a huge tank placed on four wheels with a spray at the rear something like a street sprinkler, but did not find this method successful. I prefer keeping the ground well cultivated between the rows by shallow cultivation and shallow cultivation with the hoe near the row. This may be called a dry mulch and has proved more effective with me than any method of watering the plants.

May 1st. Today I opened a box of the Winter Banana apples and found them in fine shape. The apples were picked in October, packed in box and left in an outbuilding until winter set in, then taken to our storage cellar and there kept until the day they were opened. On account of the decidedly fine appearance of this apple, quality early bearing and good growing qualities of the tree I anticipate that they will become a leading orchard variety when well known. I would that I had time to set out a ten acre orchard now.

Several trees of Bechtels flowering crab and other of English walnut were overlooked last spring and were not planted until after the middle of June. Today every one of these trees are budding nicely. These trees were carefully planted in large holes dug and wet sharp sand mixed with loamy soil well firmed about the roots. Seventy-five per cent. of the trees that fail to live are lost owing to insufficient attention to the soil that is put directly around the roots and to the proper firming. We pound the soil down if anyway light.

#### Street Sweepings as a Fertilizer.

As I was driving along the street opposite my residence at Rochester, N. Y., I saw men cleaning and scraping the streets to clear up the accumulated mud mixed with refuse of the entire winter I asked them if they would pile up this refuse on my lot nearby. They said they would but they did not consider it of much value. They deposited four or five loads which I have used in fertilizing my flower beds, strawberry and asparagus beds. I have found this fertilizer, and also the sweepings of the streets during the summer months, a very profitable fertilizer. My opinion is that the value of these sweepings is not appreciated. On one occasion I spread an inch or two deep over my new made lawn and sowed grass seed thereon. The street sweepings were so strong that, though the grass seed sprouted and grew a little, every plant was soon burned out by the strength of the fertilizer. After that I was careful in applying the street cleanings so that it should not be strong enough to injure the plants and especially the roots of the plants.

#### Non-Bearing Fruit Trees.

Joseph Agli of Kansas wants to know why his apple trees planted eight years ago have not yet borne fruit.

C. A. Green's Reply: I reply to such letters as this almost daily. If I could be present on the spot and look at the trees and the soil and learn of the culture and attention that has been given, it would be difficult for me to tell why the

trees are unfruitful. It is far more difficult for me to diagnose this case, not knowing any of the circumstances. It is something like asking me about the health of your Kansas neighbor without having seen the man or knowing any thing of his condition or past life.

Trees that are growing rapidly on rich soil are not inclined to bear fruit early. Anything which lessens the growth of the trees will be inclined to promote fruitfulness. If you wind a wire around one of the large branches tightly, the wire will cut into the bark and impede the circulation of sap and throw that branch into fruiting early. There are many valuable orchards which up to the age of nine years have borne no fruit. An apple tree must be about fifteen years old on the average before it begins to bear paying crops, but there are exceptions. Certain varieties bear fruit early, but other varieties like Spy come into fruiting only after many years growth. No one should be discouraged because an apple tree has not borne fruit after eight years planting. Cherry trees, particularly the hardy red cherry, dwarf pear trees and peach trees come into bearing early. I have grown fruit for many years but do not recall an instance where my trees have not rewarded me with fruit.

#### Why Do Plants and Trees Perish?

It has been estimated many times that not over one-half of the plants, vines and trees, sent out by nurserymen to farm and village homes each season ever live to come into full bearing. I doubt if this statement is accurate, but many trees do perish in the hands of the planter. The main causes of the loss of these plants, vines and trees are as follows:

The branches are not cut back at planting or soon after, as they should be, leaving simply short stubs of branches four to six inches long. This pruning is necessary for vines and shrubs, especially roses.

The ends of the roots are not cut off with a sharp knife so as to induce fresh root growth.

The trees are planted too deep or not deep enough.

The soil is not compacted firmly over the roots. After the firm packing of the soil over the roots, the last shovel full of earth should be left loose on the surface as a mulch and a forkful of strawy manure should be thrown around the tree, plant or shrub.

Often the tree or vine after being planted is forgotten, whereas it should be visited frequently and given cultivation, and should be watched for injurious insects.

Sometimes farmers will turn the cattle into a field planted with vines, shrubs or trees. Cattle are sure to destroy the trees.

Many times the plants or shrubs are left exposed to the sun in a wagon for many hours while planting is going on.

Properly planted and cared for, not one vine, shrub or tree in a hundred should perish.

#### Two Strawberries.

The question is often asked, What varieties shall we plant to fertilize the blossoms of certain other varieties that are not self-fertilizing?

While the Corsican strawberry, long a favorite of mine for home use or market, is hermaphrodite, having bi-sexual blossoms, I have long suspected that it will bear more abundantly when planted near other perfect blossoming varieties, therefore last spring, 1911, I planted two rows of Brandywine along side of two rows of Corsican. Though Brandywine is our very late variety and Corsican is moderately early in ripening, I find both varieties blossoming at the same date, therefore I shall expect the two rows of Brandywine to help fertilize the blossoms of the Corsican through the agency of bees and other insects, and by the wafting of the pollen by the winds.

The point I want to make is that it would seem from this experiment that late ripening varieties do not necessarily blossom later than moderately early ripening varieties, and that almost any perfect blossoming strawberry will do to fertilize the blossoms of early or moderately early varieties.

The same peculiarity to which I have called attention in the Corsican strawberry, seems to exist in certain varieties of pears and apples, which though they have perfect bi-sexual blossoms, are never-

theless improved in productiveness by being planted near other varieties in which the sexual character of the blossoms is more pronounced or vigorous or in which the blossoms provide more pollen.

It is assumed by many from long experience that pistillate or imperfect blossoming varieties of strawberry are more productive when planted near hermaphrodite varieties than are the bi-sexual varieties under favorable circumstances. The reason for this may be that the pistillate varieties are not exhausted by the production of pollen, which is assumed to be a strain on the plants producing it.

My readers have doubtless noticed that heavy, drenching rains occurring at the time of blossoming of plants or trees lessen the fruit crop, and some times ruin the fruit crop of that season, owing to the fact that the pollen is washed away by the rains, and for the further reason that bees and other insects do not have the usual time or opportunity to carry the pollen from one plant to another during seasons of frequent heavy rains.

#### Summer Pruning of Grape Vines.

There are many ways of managing, training and pruning grape vines. Some favor one system for one locality and others another system for another locality. The principle is much the same in all methods of pruning, which is to remove nearly all of the wood that bore fruit the past season, leaving only a short stub having two or three buds where each branch was grown last season. When thus pruned, a bearing grape vine has the appearance of being shorn of its strength and beauty, but by July the trellis is well covered with a new growth of vine full of immature clusters of fruit.

At this summer season we begin to see in the rural publications allusions to summer pruning of the grape, and the editor begins to get inquiries as to whether he favors summer pruning and what its benefits are. At Green's Fruit Farm we do no summer pruning and do not deem it necessary, but a friend of mine spends several weeks of his own time and the time of his men in going through his vineyard cutting out green shoots here and there. There are grape growers who could write a book telling about the advantages of summer pruning and how it should be done, but nevertheless the readers of Green's Fruit Grower need not be worried for I assure them that they can grow plenty of delicious grapes in fine large clusters without any summer pruning whatever. It is my opinion that they might do more injury than good to their vines by attempting to summer prune them, but that the winter or spring pruning should be done before the new growth starts in June is of vital importance. No one can grow good grapes without giving his vines an annual pruning in winter or early spring. If, however, this early pruning has been neglected until June, no matter what the consequences are, it had better be deferred until the next winter or spring.

#### Brief Directions for Spraying.

Four classes of pests and their treatment, says Fruitman and Gardener.

1. Biting insects, such as potato beetles, cabbage and apple worms, and currant and gooseberry worms. Spray with lead arsenate, Paris Green or Hellebore.

2. Sucking insects, such as plant lice. Spray with kerosene emulsion or Whale Oil Soap.

3. Scale insects, such as San Jose Scale. Spray with Lime Sulphur Wash.

4. Fungus disease, such as Apple Scab, Potato Blight, Rusts, Mildew, Leaf Spots, etc. Spray with Bordeaux Mixture or Lime Sulphur Wash.

Spray 4 times if possible. Use 6 to 8 gallons of liquid per tree in 4 applications. The materials will cost from 6 to 10 cents per tree. The total cost of spraying, including materials, labor, interest and wear on machinery need not exceed 18 to 25 cents per tree in good sized orchards. Potatoes can be sprayed for \$5 per acre.

Spray apple trees just before blooming, then within 8 days after petals fall, again two weeks later and finally the last of July. Use both an insect poison and a fungous poison, applying both at once. Use Lead Arsenate or Paris Green for the insects and Bordeaux Mixture or Lime Sulphur Wash for the diseases. Better buy the Lead Arsenate and Lime Sulphur already prepared unless you have had experience in making these mixtures. Write us if you wish help in getting the materials or in fixing tanks or towers for mixing them.

#### The Little Red Schoolhouse.

Considered from an esthetic point of view the "little red schoolhouse" and its surroundings are about the most neglected in the average rural community. Its structural features are plain and unadorned. It is surrounded in some cases by a plain, tight board fence that makes the yard resemble a paddock, and defines so that all may see the stingy allotment of land. The dooryard is rough and in many

cases ungraded. There is no flower-bed, no shrub or tree to break the burning rays of the sun, and nowhere in sight is there a well from which the youngsters may slake their thirst. The outhouses are makeshifts.

There is no evolution or improvement here, no hint of the high standards of civilization. Children in whose homes are found all the conveniences, running water, steam heat, lavatories, etc., must do without when they enter the portal of the usual "little red schoolhouse." Truly, such a condition is a disgrace. From a technical standpoint neither expense nor pains are spared to provide the latest and best textbooks, charts and appliances. And the teachers are of a higher grade and salaries have nearly doubled. But there improvement ceases.

In view of the fact that the district school has been the fountain from which many of our foremost thinkers, statesmen, scholars and presidents have obtained their elementary training, but especially of the highly important place these institutions still hold, is it not time that rural communities took that degree of local pride and interest in the "little red schoolhouse" that will make of it a thing of beauty and its grounds an attractive, miniature park? No single movement looking to "rural life uplift" or the "redirection of agriculture," would be a longer step in the right direction.—C. F. Bley, Hamburg, N. Y.

#### Dynamite Explodes in Man's Pocket.

Thomas J. Leary, the town tree warden, sat down beneath a tree on East Roxboro street to-night and a moment later a terrific explosion blew him to pieces. A hole three feet deep was made in the ground where he had been sitting. The report of the explosion was heard for miles and houses a quarter of a mile away rocked dangerously.

The cause of the explosion is not positively known, but the theory is that Leary, who was a contractor, had a stick of dynamite in his pocket and that when he sat down it came in contact with a stone. Leary was 35 years of age and single.

Farmer's get an experienced man to use dynamite.—C. A. Green.

#### Pruning Fruit Trees.

In pruning fruit trees, attention has to be given to the manner in which the particular kind bears its fruit. The cherry and the pear both bear their fruit on short spurs, and in trimming, therefore, the effort should be to produce a large quantity of healthy fruit spurs. Summer pruning does this admirably. The branches that we want to remain as leading shoots should not be touched; but the weaker ones may be pinched back, about mid-summer, one foot or two-thirds of their growth. This will induce the swelling of a number of buds that will produce flowers instead of branches, and in this way, fruit spurs can be obtained on comparatively young trees; but with such kinds as the grape vine, the fruit is borne on the branches of last years growth, so the effort should be to throw all the vigor possible into those growing branches that we want to bear fruit the next season. To do this, we pinch back the shoots that we do not want to extend; or even pull these weak shoots out altogether. A little pruning is then necessary, in the winter, to shorten back these strong, bearing canes, or to prune out altogether the weaker ones that we check by pinching back during the growing season.

#### Climbing Vines.

Climbing vines have many different methods of attaching themselves to their support—some encircle a branch of the host by twining their main bodies around the support. A hop vine is a familiar illustration of this. More delicate ones cannot twist around their stakes, but have to have string or some similar material to cling to. The ordinary morning glory is an illustration of this class; but there are some which simply climb by twisting the leaf stalk around the support. This is especially true of the different kinds of clematises, yet it is not unusual in some gardens to see stakes as thick as walking canes put for the clematis to run up on; but as it is unable to do this they have to be tied to this pole by twine, while the leaves go on twisting themselves in order to find something to cling to, and as a consequence, the vital powers of the plant are exhausted. In many cases the clematis, especially the variety known as Jackmanni, will die completely and suddenly from the attack of a minute fungus; but it is more likely that this occurs oftener in cases as described for want of the proper means of support. Thread or twine for the leaves to twist around, or even a little brush wood, such as we would give to a crop of peas, is much more likely to produce healthy and vigorous clematises than when they are deprived of all means of using their leafstalks as tendrils.



## About Trees.

Written for Green's Fruit Grower  
By Robert B. Buckham, Mass.

Not long since I had occasion to endeavor to ascertain just what the correct definition of a tree was. What is a tree, anyway? Turning to Worcester's dictionary, I found it defined thus: "Tree: The largest kind of vegetable." So that if one, in the course of his rambles, should come upon a monster squash, for example, so long that it stood on end it would be as tall as a church steeple, this would be a tree, would it? Surely, away out west, where some of the popular yarns that go the rounds inform us that vegetables grow so rapidly and enormously that it is dangerous to drop a seed on the ground, lest one get caught and carried beyond rescue by the ensuing growth, there must be lots of trees, such as the lexicographer's definition would suggest. Then, too, there is that popular rhyme of our childhood days, about Peter the Pumpkin-eater, who had a wife and couldn't keep her; but hollowed out a pumpkin shell and therein kept her very well. Certainly a vegetable of such a kind as that, capable of being pared down into a residence sufficiently spacious to satisfy so particular a wife, would be entitled to be classified as a tree!

But to be serious, it is no easy matter, I think the reader will admit, to define any object in half a dozen words; or adequately to enumerate its distinctive qualities. As far as the writer is concerned, a tree might be defined as being the most interesting kind of all vegetable growths, and allowed to go at that, for with me there is no other form of vegetable life half so all absorbing as are these old time friends of the race.

What an important part in the history of mankind, from its very beginning to the present, the trees have played! They afforded for the first men alike, food, shelter and clothing. In the shelter of their friendly depths was man's first home and to this day, the dim recesses of the forest thrill us with vague, mysterious sensations, the still remaining vestige of a memory of ancient days, handed down by inheritance from generation to generation.

Thoreau, the famed nature lover of Walden, describes how he would often wade some miles through the deep snow to "keep an appointment with a beech tree," so fond was he of old friends of this kind, which he had come to love as he would humankind, and which he often visited.

There have been many strange superstitions entertained about trees in days past. Perhaps one of the strangest and longest to survive is referred to with the utmost credence by so accurate a writer as Isaac Walton, father of the "gentle art of angling," who quotes thus:

"So rotten planks of broken ships do change  
To barnacles. Oh transformation strange!  
'Twas first a green tree, then a broken hull;  
Lately, a mushroom; now, a flying gull."

The commentator adds: "It was supposed that on the banks of a stream in the Orades grew a tree which produced live geese as its fruit. In an old volume printed in 1550 is an amusing cut representing the barnacle goose dropping from bursting pods on the tree into the stream beneath, and swimming off."

We of today know that it is impossible for trees of any kind to produce animate life, yet we must admit, nevertheless, that they do foster and nourish it, so in a way preserving and perpetuating it; providing for man himself, the highest type of life, his home, and its furnishings, and many of its most choice delicacies.

What part the trees are yet to play in the future of the race, it would be impossible even to suggest. The blessings awaiting man from this source seem to have been realized, yet, but in small degree.

## Fruit Growers Wanted.

Written for Green's Fruit Grower  
By Frank I. Hanson.

Who mean business.  
Who really love the work.  
Who will keep up-to-date.  
Who are not afraid of hard labor.  
Who deal only with reliable nursery-men.  
Who will keep his ground free from rubbish.  
Who will not over-crowd his trees and vines.  
Who will aim for improvement, both in quantity and quality.  
Who will not allow a poor yield discourage him from still greater efforts.  
Who will persistently war against the borers and other injurious pests.  
Who will agitate the question of co-operative selling among his neighbors.  
Who will send products to market only in the best possible shape.  
Who realize that pruning is essential to success and will strive to become proficient.

Who will be as honest in selling as they expect others to be—important.

Who will keep their reading table supplied with literature covering various phases of fruit culture.

Who will ascertain as soon as possible the variety best adapted to their soil and then work persistently for success.

Apples grown under conditions of natural rainfall possess a flavor all their own, a flavor delicious to the palate and one that those of irrigated Washington and Oregon will never have. This, Secretary Wilson says, may be due to some defect in knowledge regarding irrigation, but it is true, nevertheless. Certain it is that the fact has been proven by comparison, and will be demonstrated when the seat of Government has its first apple show at Washington, D. C., in November, and to some extent also at the New England Fruit Show in Boston the last of this month. Our western competitors have been much quicker to recognize the advantage of high cultivation and spraying against the codling moth worm and other pests and diseases; but eastern growers have now come to realize that the application of science to apple growing brings as sure results as it does in the chemist's laboratory. Apples are probably the most wholesome of all fruits, and thousands of new orchards are being planted every year says Am. Cultivator. Within the next decade the apple will become the king of fruits as never before.

## Liming The Soil.

The amount of lime present in the soil varies greatly according to the soil; but no soil can be regarded as fertile unless it contains one-half per cent. of lime. This may sound very little, observes a writer in The Smallholder, but since in good agricultural loam the upper 9 ins. contain about 3,000,000 lbs. of soil to one acre, one-half per cent. of lime represents 15,000 lbs. or 6 1-2 tons. Five per cent., or even 10 per cent. of lime, which are found in some soils therefore mean a tremendous store of this most important soil constituent, and the usual 3 or 4 tons of lime applied at long intervals to the soil represent only a very small fraction of one per cent. It is not necessary to describe here the exact process which is going on in the soil when lime has been added, and we will only deal with the facts. These are, first, that the lime improves and sweetens the soil, that it enables other manures to act better, and that it keeps down certain pests which flourish in sourish or lime-free soil. On the latter point it is a significant fact that the "finger-and-toe" disease seems of late years to have spread all over the country, causing severe loss to turnip growers, and this spread of the disease coincides with liming having gradually fallen into abeyance.

## \$6,000,000 Worth of Swine in the State.

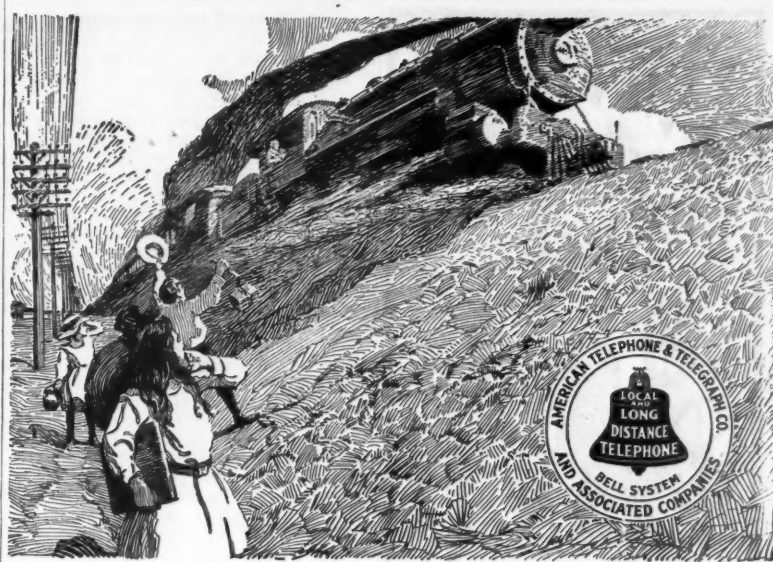
A recent census bulletin reveals the fact that New York state has swine on 107,292 farms and that their total value is \$5,900,658.

Iowa has the largest total value of swine on farms, amounting to nearly \$70,000,000. Illinois ranks second with \$36,000,000. Then other states report more than \$10,000,000 each as the value of swine on farms. They are: Missouri, \$31,879,000; Nebraska, \$29,642,000; Kansas, \$24,681,000; Indiana, \$23,740,000; Ohio, \$19,403,000; Minnesota, \$13,921,000; Wisconsin, \$13,621,000; Texas, \$11,605,000; Oklahoma, \$11,272,000; South Dakota, \$10,381,000. In these twelve states the total value of swine on farms is \$295,864,000, or 74.3 per cent. of the value of all swine on farms for Continental United States.

The value of swine on farms in the United States has increased \$166,025,000 or 71.6 per cent. in ten years.

## Trees Winter Killed.

Trees that have been severely winter killed should be severely pruned, cutting away as much as possible of the injured wood and leaving only fresh, clean wood. Improve the process of cultivation and tillage the following season and usually the plants will, to a large extent, overcome the injury within a year or so. If the trunk of the tree is severely injured it can be cut back and permitted to send up the sprout which can take the place of the original top. In the case of a few isolated trees in an orchard, the sprout renewing the top may come from below the union of the scion and stalk, and in this case will be necessary to bud or graft this stalk at the point where it is desired to have the framework of the trees developed. This is a successful method if carefully practiced and will produce results in less time than could be accomplished by digging out a three-year-old tree and re-planting. There is no treatment in the form of a fertilizer, or special application that can be given that will be more beneficial to the trees than simply good tillage with a good supply of water, in order that the trees may make a full normal growth during the summer.

The Right of All the Way

Railroad service and telephone service have no common factors—they cannot be compared, but present some striking contrasts.

Each telephone message requires the right of all the way over which it is carried. A circuit composed of a pair of wires must be clear from end to end, for a single conversation.

A bird's eye view of any railroad track would show a procession of trains, one following the other, with intervals of safety between them.

The railroad carries passengers in train loads by wholesale, in a public conveyance, and the service given to each passenger is limited by the necessities of the others; while the telephone carries messages over wires devoted exclusively for the time being to the individual use of the subscriber or patron. Even a multi-millionaire could not afford the exclusive use of the railroad track between New York

and Chicago. But the telephone user has the whole track and the right of all the way, so long as he desires it.

It is an easy matter to transport 15,000 people over a single track between two points in twenty-four hours. To transport the voices of 15,000 people over a single two-wire circuit, allowing three minutes for each talk, would take more than thirty days.

The telephone system cannot put on more cars or run extra trains in order to carry more people. It must build more telephone tracks—string more wires.

The wonder of telephone development lies in the fact that the Bell System is so constructed and equipped that an exclusive right of all the way, between near-by or distant points, is economically used by over 24,000,000 people every day.

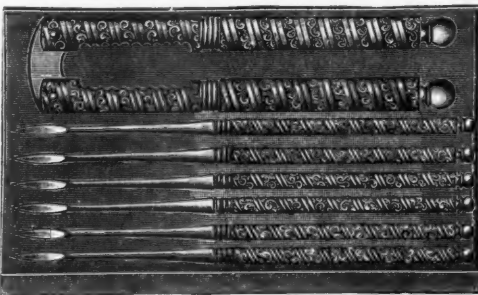
AMERICAN TELEPHONE AND TELEGRAPH COMPANY  
AND ASSOCIATED COMPANIES

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One System

Universal Service

## A Beautiful Nut Pick Set



This is both a useful and an elegant premium. The set consists of a handsome and strong nut cracker and six individual nut picks, all in a neat and durable case. Both the nut cracker and the nut picks are made of the very best steel, are beautifully designed and heavily plated. They will be a real delight to you and your guests. The handles of the nut picks are made in a pretty design, while the points are highly polished. The nut cracker is of a design corresponding to the nut picks and is made for good strong service. A set should be in every home. Of course you want one.

How to get one of these Beautiful Sets: Send us four new subscribers to Green's Fruit Grower at the special low price 35 cents each per year and we will send you the Nut Pick Set charges prepaid.

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Combines the best features of the Lime-Sulphur, Oil Emulsion and Soap Sprays, against scale, all soft-bodied insects, and fungus diseases. Endorsed by Experiment Stations. Cheapest and most effective. Unequalled insecticide and fungicide. Sample and prices on request.

**ENTOMOID CHEMICAL CO., Woonsocket, R. I.**

**APPLE GROWING**

The healthier the tree, the better the fruit. The longer trees are sprayed with "SCALECIDE" the more beautiful, healthy and fruitful they become. "SCALECIDE" is the acknowledged leader of all soluble oils—the only one containing distinct fungicidal properties. "SCALECIDE" will positively kill all soft-bodied sucking insects without injury to the tree. Let us prove these statements. Send today for free booklet "SCALECIDE—the Tree Saver." Address B. G. PRATT CO., Mfg. Chemists, 50 Church St., N. Y. City.

**KEES FRUIT PICKER**



Gather Apples, Peaches, etc., as carefully as by hand with less work. Saves climbing ladder. No fruit out of reach. No wire to injure fruit or tangle in branches. Fruit drops into cloth bag, which can be filled before lowering. Price complete except long handle (a fish pole will do) 75 cents, postage paid. Your money back if not O. K. Circular sent on request. Address F. D. KES Mfg. Co., Box 900, Beatrice, Nebraska.

**Sandow \$42.50**  
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Gives ample power for all farm uses. Only three moving parts—no cams, no gears, no valves—can't get out of order. Perfect governor—ideal cooling system. Uses kerosene (coal oil), gasoline, alcohol, distillate or gas. Sold on 15 days' trial. **YOUR MONEY BACK IF YOU ARE NOT SATISFIED.**

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Please mention Green's Fruit Grower.

### Spraying for Economy.

Written for Green's Fruit Grower  
By Prof. H. E. Van Deman.

Among the good resolutions that have been made from time to time by those who read the rural papers are those to put in practice the oft-repeated directions for spraying trees, vines, etc., against insect and fungus enemies. If the reader is one of this number, perhaps he may now be debating in his mind whether or not to make the attempt this spring. If so, let me urge him to no longer delay it. The time was when these pests were much less harmful, because they were not so numerous, but now there is scarcely a fruit, flower or vegetable that does not have some liliputian enemy, whose myriads make up in numbers what they lack in size. It is especially strange, that anyone who is growing fruit can be so short-sighted as to neglect the means of fighting them that science has put within our power. Spraying machines are as much a part of modern orchard and garden tools, as pruning shears and cultivators. There is not an orchard, garden or farm, that would not be better for their use. Indeed, in some cases, it is almost a question of abandoning the cultivation of certain crops, or the use of spraying machines for their protection.

He who does not spray from this time on, will be left behind in the race for success in the market, and his family supply of fruits will be deficient in both quantity and quality. There are those who have taken advantage of the aids to practical horticulture, and their fruits are known in the markets as being smooth, clean and sound. Anyone knows how poor a chance for sale, wormy, knotty or scabby fruit has beside that which is not so. Therefore why continue to grow it, and cumber the market with a lot of trash that is only fit for the hogs? Certainly there is little profit in it to the producer, the dealer wishes he had never seen it, and the consumer is disgusted with it.

### Quince Culture.

The fruit of the quince is in such great demand in all large cities that it should stimulate farmers and fruit growers to greater efforts to succeed with the trees they set out. Quinces do best in deep, cool soil, though in dryish places they will do fairly well if mulched. To have the roots cool is a great step towards success. If by themselves in rows they can be planted about twelve feet apart. There need be no fear of over-feeding the quince. They like lots of rich food. Kitchen washings and materials like this they delight to get, and when well fed in this way and rich food is spread about the surface of the ground the borer is not at all troublesome to them. When the quince is suited in this way, and grows as it should do, it begins to bear in three years, and afterwards it never fails of a crop, and seventy-five to one hundred quinces can be had from full-grown trees. But few persons prune quinces, yet it is an important thing to do. There must be young wood or there will be no flowers and no fruit, yet how often do we see large bushes with nothing but old, stumpy-looking branches on them. If your trees are like this, cut them back one-half or so, to get a good stock of young wood. Then cut them back a little every winter, topping the last season's wood and cutting the older growth back closer. This is an essential point, and yet one rarely thought of or practiced. As a rule flowers are produced abundantly on a healthy quince bush, but for some reason the first to open rarely set. It is the later flowers which produce and bring forth the fruit.

What shall be done with the stony fields? Plant them with orchards, and let these orchards be made in runs for poultry. The two will make not only pleasant, but very profitable, employment.

### Planting Orchards in Sod.

We would not advise you to try to plant an orchard this fall on sod ground. It will take a whole year of cultivation, with some hoed crop to get the sod rotted down enough to make it fit for young trees to grow in. You might, by plowing the sod shallow, set it to rotting this fall and then a deeper plowing in the spring would put it in tolerable condition. But you have already purchased the trees and do not know what to do with them unless you can plant them at once. Our advice would be to heel them in this fall, and in the spring, if the sod turned now cannot be got in the best condition, plant it with corn or potatoes and set the young trees in a clump by themselves to grow another summer. When the hoed crop is removed in the fall the trees can be replanted where the orchard is wanted. Some will say "Why not plant the orchard now, and then plow and cultivate in a hoed crop next summer?" That will make extra care needed in working around the small trees, and probably some of them will be destroyed. It will, besides, lose the advantage

of the second transplanting. Trees as they come from the nursery have grown three or four years in one place. They need to be transplanted twice in order to get a set of fine roots near the body of the tree. Trees thus managed will make better growth and come into bearing more quickly than if set at once, as they come from the nursery, where they are to grow.

### Hints for the Bath.

Soap and water may make the skin clean, but friction is necessary to make it smooth, and exercise is necessary to make the flesh firm. After the bath the body should be dried with a soft towel, then with a Turkish one, and finally rubbed vigorously with Turkish mittens. Roughness of the skin is very frequently due to imperfect drying, and whoever aims to preserve anything approaching smoothness must be careful to rub down thoroughly after every bath.

### Productiveness of the Bartlett Pear.

It is said, by some good authorities, that the Bartlett pear is one of the varieties that sometimes produce weak anthers, and that for want of pollen, the tree is sometimes unproductive. In this case it has to depend on pollen from other trees. This can scarcely be the case in the Central states, for there trees entirely isolated, regularly bear full crops. Sometimes, instead of the want of pollen, the infertility arises from a difference between the maturing of the pollen and the appearance of the female flower. In those localities where there are sometimes warm spells in winter, the pollen will mature far ahead of the development of other parts of the flowers. When the flower is, therefore, really in bloom the pollen has all been perfected and blown away. This is probably the real reason why many fruit trees are occasionally infertile.

### Trained Peach Trees.

Peach trees, in England, are trained on walls having southern aspects, and in this way get heat enough to mature. The branches are skilfully trained, so as to cover the whole surface of the wall with branches a few inches apart. In some cases glass fronts are placed before the walls, to give additional heat. There is one tree, in the north of England, treated in this manner, which is considered a great curiosity in that country. It covers a wall twenty-three feet long by seventeen feet deep, and four hundred and twenty good sized peaches have been gathered from the tree, in a single season. The variety is the Royal George; and the age of the tree is fourteen years. In this special treatment of the peach everything then can aid in the health and growth is of course assiduously attended to. Inferior fruit is taken out when quite small, and no one fruit is allowed to crowd upon another. Under these circumstances the fruit produced is remarkably fine, no one being seldom less than six inches, and many reaching eight inches round, while the flavor is correspondingly delicious.

Herodotus tells us that when a king died in ancient Scythia, those who attended him cut off one ear, shaved their heads, wounded themselves on the arm, forehead and nose and pierced the left hand with an arrow. Furthermore, the undertakers or managers of the royal funeral had to furnish a woman, a cup-bearer, a cook, a waiter, a messenger and a certain number of horses; all to be killed. In fact, in the particular king's funeral which the great Greek historian is describing they took the king's ministers, fifty in number, and strangled them. Then having killed fifty of the chief horses of the king, they prepared them and set them in a circle, upon each one a strangled rider, that they might serve as a royal guard to the dead hero.

Trees cannot usurp the place of a broader agriculture, but can often be worked in conjunction with it. That farmer is but "casting an anchor to windward" who plants an orchard, a vineyard, a nut grove or a tract of timber. If he cannot live to enjoy it to the full his children may.

### Gift of \$1,000,000 To Aid Scientific Farming Announced.

A movement to put a county agriculturist in all the counties of every state, to make a study of local conditions and suggest plans of scientific farm management for the purpose of obtaining a larger yield of better grain, received impetus to day with the announcement of a gift of \$1,000,000 from a Chicago firm to further the plan.

The project is favored by the crop improvement committee of the council of grain exchanges, which includes bodies in many of the principal cities in the United States.

It is intended to start with expenditure of \$1,000 in each of 100 elected counties.

### Some Simple Remedies.

The terrible pangs of a felon are cut short by the application of intensely hot water. Have the water as hot as can be borne, place the finger in and keep renewing the hot water for several hours.

A large proportion of all cramps and pains can be relieved by water of proper temperature and intelligently applied.

In case of burns from acids or alkalies, use cold water freely, as every application will tend to dilute them and render them less liable to injure the skin.

In case of a wound where there is considerable bleeding, use cold water applications freely. For bruises, the immediate application of cold water, or some evaporating lotion—such as camphor or weak tincture of arnica—is the best treatment for alleviating suffering and hastening the absorption of blood.

When a sprain occurs, lose no time in attending to it, however trivial it may appear. Ascertain whether there has been a fracture or dislocation. If so, send for a physician as soon as possible and keep perfectly quiet until he arrives. If there is no fracture or displacement of bones, but only excessive swelling about the joint, bathe the injured member in as hot water as possible. Bathe for 15 or 30 minutes, renewing the water occasionally and applying with a sponge. Then wrap the injured member in strips of flannel saturated with hot water and cover with dry cloths. Do not use the sprained member until recovered. Complete rest is the only cure for a sprain.

For bleeding from the nose, hold a sponge saturated with cold water to nostrils and nape of the neck. In case this does not succeed the bleeding can be stopped by vigorous action of the jaws. If a child, a wad of paper may be placed in the mouth, and the child instructed to chew hard. It is the motion of the jaws that stops the flow of blood.

To ease rheumatic pains, boil a few potatoes and use the hot water in which they were boiled. Dip some cloths in, wring out, and apply as hot as possible. A small vegetable press, such as are retailed for 25 cents, is excellent to wring out hot cloths. It saves time and scalded hands.

### The Virtues of Salt.

A little salt rubbed on the cups will take off tea stains. Put into whitewash, it will make it stick better. As a tooth-powder it will keep the teeth and gums hard and rosy. It is one of the best gargles for sore throat, and a preventive of diphtheria, if taken in time. Use salt and water to clean willow furniture; apply with brush, and rub dry. Salt and water held in the mouth after having a tooth pulled will stop the bleeding. Prints rinsed with it in the water will hold their color and look brighter. Two teaspoonfuls in half a pint of tepid water is an emetic always at hand, and is an antidote for poisoning from nitrate of silver.

Neuralgia of the feet and limbs can be cured by bathing night and morning with salt and water as hot as can be borne; when taken out, rub the feet briskly with a coarse towel. Salt and water is one of the best remedies for sore eyes, and if applied in time will scatter the inflammation. Silk handkerchiefs and ribbons should be washed in salt and water, and ironed wet, to obtain the best results. Food would be insipid and tasteless without it. Hemorrhages of the lungs or stomach are promptly checked by small doses of salt.

### Medical Use of Vegetables.

The large, sweet onion is very rich in those alkaline elements which counteract the poison of rheumatic gout, says the Medical Record. If slowly stewed in weak broth, and eaten with a little Nepal pepper will be found to be an admirable article of diet for patients of studious and sedentary habits. The stalks of cauliflower have the same value, only too often the stalk of a cauliflower is so ill-boiled and unpalatable that few persons would thank you for proposing to them to make part of their meal consisting of so uninviting an article. Turnips, in the same way, are often thought to be indigestible, and better suited for cows and sheep than for delicate people, but here the fault lies with the cook quite as much as with the root. The cook boils the turnip badly, and then pours some butter over it, and the eater of such a dish is sure to be the worse for it. Try a better way. What should be said of lettuce? The plant has a slight narcotic action, of which a French woman, like a French doctor, well knows the value, and when properly cooked it is really very easy of digestion.

### Child Meets Strange Death.

While watching a bonfire near his home on the East Side of New York to-day, Florian Schried, five years old, was instantly killed by a bullet from a cartridge that had been thrown into the fire. Two years ago his sister, nine years old, was killed by an automobile, and five months ago, his brother, twelve years old was killed by a brick falling from a roof.



### BIG FRUIT COMBINATION. Growers of the Pacific Northwest Unite to Wipe Out Middleman.

After more than a year of organization and negotiation fruitgrowers of Washington, Oregon, Idaho, and Montana have formed a huge selling agency that is intended to wipe out the middleman, who have reaped large profits from the orchardists. This agency has united more than a score of strong associations of growers with the Northwestern Fruit Exchange, which has already built up an organization for the sale of fruit in the East independently of the commission men.

The Exchange amended its by-laws to allow for mutualization, put growers' representatives on its board and provided for an advisory council to be elected by the various growers' organizations. It had sought to control the fruit selling as a private organization, but its overtures were rejected. Before its co-operation was accepted a committee of growers made a rigid investigation of its affairs and Chambers of Commerce and Clearing House associations in various cities which depend largely on the fruit trade also subjected it to searching inquiry.

### Pests of the Apple.

And now comes another well printed brochure entitled Farmer's Bulletin 492. Just think of having to absorb the wisdom of 491 bulletins before getting this one which tells of "The More Important Insect and Fungus Enemies of the Fruit and Foliage of the Apple." It takes 48 pages to tell of these "more important" enemies of the apple. What would have been the size of the book, do you suppose, if the authors had told also of the less important enemies of the apple?

The codling moth, of course, is chief of these more important enemies; but anyone who really cares about it, and the rest of them, should send to the department of Agriculture for the brochure, mentioning this paper.

### Home Fruit Markets.

When they can ship strawberries from the truck and fruit farms of Florida and Louisiana to the northern consuming centers, one need not be surprised that apples can be shipped with perfect success from Washington, Oregon and Idaho to New York and Boston, or oranges and lemons from California, Nevada and Florida to the most remote market in Maine,—yes, and Canada. Our fruits find a fairly good market even in London, Berlin, St. Petersburg, invading even the fruit growing regions of France, Austria, Spain and Italy.

But while the foreign markets may offer an outlet for surplus, it is the home market that the American farmer should watch most closely. With intelligent care and reasonable protection from Congress, the Georgia peach, the Florida grapefruit, the New York apple and pear, the lemon of California, the beet fields of the great West and the cane fields of Louisiana, need not fear for home appreciation and profitable patronage. But the home market is essential to the life of the producer, and he does well who caters intelligently to the demands of the public.

### PROTECTION FROM LIGHTNING. Metal Covered Buildings That are Lightning Proof.

The formation of lightning is very imperfectly understood, but experience with its vagaries and a knowledge of the laws of high tension electric currents have established a fairly good understanding of the methods of constructing lightning conductors for all ordinary discharges, says Metal Worker. It is very well known that lightning is the discharge of a large amount of electricity in a very short space of time and that whatever affords it a passage to the earth is likely to be badly damaged unless the vehicle happens to be a good conductor of electricity and of sufficient size to transmit the amount of electric energy the flash contains; in which case it passes away, doing no damage at all.

In considering the form of lightning conductors it is well to keep in mind the fact that a metal covered building well connected with the earth is practically lightning proof and that one with a metallic roof, well grounded, is excellently well protected if not perfectly safe. If then the roof of a building possesses a metallic ridge, eaves, troughs and downspouts, these will afford very good protection if they are well connected and well grounded. A roof covered with a metallic screen, as a chicken screen, makes an excellent protector when properly grounded.

It must be remembered that the ground connection is a positive necessity, and too much care cannot be exercised in its construction. The earth is the great reservoir of electrical energy and it is always at zero potential. If a discharge of lightning can be directed into the moist earth by a conductor its energy is soon

dissipated, but the ground connection must be of considerable area and extend well into the moist earth. A piece of galvanized iron pipe driven into the ground seven or eight feet makes a good "ground." Large buildings must have two or more such "grounds." The connecting wires must be securely fastened to the ground connections.

Wire fences are often the cause of damage by lightning because of the method of construction. If the fence wires are grounded the danger from this cause will disappear. Ground wires may be made of ordinary fence wire and should be connected with each of the wires of the fence and extend into the ground three feet. Such "grounds" should be made first each 100 feet of fence.

### PRODUCTION OF PEACHES LESS THAN YEAR AGO. Census Report 54 Trees Per Farm. DECREASE IN NUMBER OF TREES.

At the census of 1900, taken as of June 1st, there were reported 99,919,000 peach and nectarine trees of bearing age, as against 94,507,000 trees in 1910 a decrease of 5,412,000 trees, or 5.7 per cent. In 1910 there were 1,843,610 farms reporting the growing of peach and nectarine trees, or 29 per cent. of the total number of farms in the United States. The average number of trees per farm reporting is given as 54. No report was received in 1910 showing the number or forms reporting.

The returns of the 1900 census, likewise, did not secure the number of trees under bearing age. In 1910, 822,334 farms, or 12.9 per cent. of the total, had 42,266,000 trees not of bearing age, or an average of 51 per farm.

The present census shows that in 1909 there were produced in the United States 35,470,000 bushels of peaches and nectarines, having a total value of \$28,781,000. In 1899 a crop of 15,434,000 bushels was gathered.

### PRODUCTION BY STATES.

The states having the largest number of trees of bearing age in 1910 are: Georgia, Texas, California and Missouri their combined totals comprising over 36 per cent. of the total for the United States.

In 1900 Georgia had 7,669,000 trees of bearing age, against 10,609,000 in 1910, a gain of 2,940,000 trees, or 38.3 per cent. This state produced 2,555,000 bushels in 1909, valued at \$2,183,000; in 1899 the production amounted to 260,000 bushels.

There were 9,738,000 trees of bearing age in Texas at the last census, while in 1900 there were 7,248,000 trees. But the production in 1899 was almost double what it was in 1909. At the earlier census the crop amounted to 1,400,000 bushels, and at the later census to only 730,000 bushels. The value of the fruit in 1909 was \$704,000.

The farms in California reported a total of 7,829,000 trees of bearing age in 1910, compared with 7,472,000 in 1900. The production in 1909 was greater in this state than in any other, 9,267,000 bushels. The value was \$4,574,000. In 1899 there were produced 8,563,000 bushels.

Missouri had 6,588,000 trees of bearing age in 1910, against 4,577,000 in 1900. The 1909 crop amounted to 1,485,000 bushels, while in 1899 it was only 61,000 bushels. The value of the product in 1909 was \$1,111,000.

### Strawberry Culture.

There is a great difference, as to the best method of growing strawberries, between the amateur grower and the one who cultivates for market. Almost all horticultural writers, in garden periodicals, of course view the matter from the standpoint of the greatest product at the smallest cost in cash. If the grower for market finds it more profitable to have a variety that will produce an enormous crop in two or three pickings, than to have that crop scatter over a long time, and a variety that may not be quite so excellent, he will take the fruit that is more profitable than the one which gives more labor in picking, though the fruit may be inferior. In the cultivation, the fruit-grower for market usually has the plants set out so as to grow close together in one long row, while the amateur cultivator would find it more to his interest to cut off the runners as they grow and have the plants in hills, that is to say, entirely separate—one plant from another. But this requires more care, and in a certain sense more cost, for the plants when grown in this way must have some shading material placed around them. The strawberry does not mind hot sun, but the leaves insist on having the earth cool in which the plant grows. This covering, or mulching, as it is technically called, is also of use in preserving fruit from getting splashed with earth by the falling rain. Those who desire the largest, sweetest and best strawberries, without caring for a little extra labor and cost, always prefer the hill culture.

Green's Fruit Grower mailed you post-paid Four Years for One Dollar. Send us the Dollar.



## BUILT FOR YOUR BUSINESS

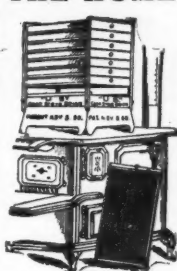
**HOLDS  
23 BUSHEL  
BASKETS**

\$85.00 with 1 1/2" axle and wheels without slatted trap doors.  
\$92.50 with 1 1/2" axle and wheels without slatted trap doors.  
\$95.00 with 1 1/2" axle and wheels with slatted trap doors as shown.  
\$102.50 with 1 1/2" axle and wheels with slatted trap doors as shown.  
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Above with shafts. Pole in place of shafts, add \$2.00.

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FLINT, MICHIGAN  
Builders of 50,000 Complete Vehicles Annually

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### THE HOME EVAPORATOR



Thoroughly tested and approved. Latest, cheapest, best. Can be used on any stove, dries any fruit.

The price of this Drier is \$6.00. Our Special Reduced Price, Only \$4.75.

### A BARGAIN

If ordered at once, Green's apple parer, corer and slicer with the Home Evaporator, all for \$5.50.

Send for circulars describing larger Evaporators, Parers, etc.

### SENSIBLE FRUIT AND CIDER PRESS



A well made and handsome Press for making cider, wines, jellies, syrups, etc.

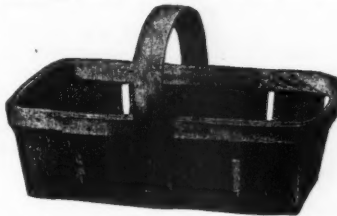
Made with special reference to strength, and guaranteed against breakage under any fair usage. All iron and steel, stronger and better than the old wooden press. It has double curbs.

PRICE, ten qt. curbs, weight, 40 lbs., \$3.95.

### CLIMAX BASKETS

For shipping Plums, Cherries, Grapes and other small fruits. They are strong, well made and complete with covers and fasteners. They are generally used for shipping some distance and are built to stand the travel. The 8-lb. size is also much used for shipping eggs for hatching.

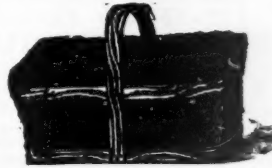
Price of 8-lb. Climax Baskets, complete with cover and fasteners, \$27 per 1000, \$16 per 500, \$3.50 per 100.



### SPLINT BASKETS

Are lighter than the Climax and are generally used for Plums, Cherries, Grapes and other small fruits in nearby or home market, where covers are not wanted. They are used almost exclusively in Western New York in preference to any other.

Price of 8-lb. Splint Baskets, without covers, \$20 per 1000, \$11 per 500, \$2.50 per 100. Covers for 8-lb. Splint Baskets, \$5 per 1000.



### STANDARD PEACH BASKETS

Western New York standard "one-third" peach basket, made of the best material and wire sewed. Best for home market or for shipping.

Price, \$25 per 1000, \$13 per 500, \$3 per 100, \$1.75 per 50.

Special Prices on large lots of all kinds of fruit baskets quoted on application.

NOTICE—All prices for baskets are subject to change without notice. Order early and get the lowest prices. When the season comes on there is a general rush for baskets. If you delay ordering, you may not get them in time at any price.

The above prices subject to change without notice.



### THE NIAGARA FRUIT LADDER

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Price, 30 cents per foot, 6 ft., 8 ft., 10 ft. and 12 ft. always carried in stock.

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Trinidad Lake asphalt is Nature's everlasting waterproofer—and that's what Genasco is made of. Write for samples and the Genasco Book—free.  
The Kant-leak Kleet, for smooth-surface roofings, prevents nail-leaks.

The Barber Asphalt Paving Company  
Largest producers of asphalt, and largest manufacturers of ready roofing in the world.

Philadelphia  
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pump more water than any other ram for equal amount of power water—the most efficient device made for pumping water by water.

Cost little to install—nothing to operate. Raise water 30 feet for every foot of fall. Will supply pneumatic tanks against 100-lb. pressure. Pump automatically day and night, winter and summer. Fully guaranteed.

If there is a stream, pond or spring within a mile, write for plans, book and trial offer, FREE.

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Rise to the dignity of sound business. 100 Note-headers, 100 Envelopes, 100 Cards, \$1 postpaid. Neatly printed with name of farm and products. Be up-to-date; advertise your stock, poultry, dairy products, etc. NATIONAL PRINTING CO., Shelbyville, Ind.

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Sizes 10 to 40 barrels daily, hand or power. Presses for all purposes, also cider evaporators, apple-butter cookers, vinegar generators, etc. Catalog free. We are manufacturers, not jobbers.

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Proved capacity, great strength, all sizes. Write for FREE catalog today.

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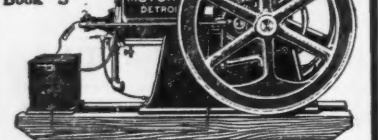
## ABSORBINE

Will reduce inflamed, strained, swollen tendons, ligaments, muscles or bruises. Cure the lameness and stop pain from a Splint, Side Bone or Bone Spavin. No blister, no hair gone. Horse can be used. \$2 a bottle delivered. Describe your case for special instructions and Book 2 E free.

ABSORBINE, JR., the liniment for mankind. Reduces strained, torn ligaments, enlarged glands, veins or muscles—heals ulcers—alleviates pain. Price \$1.00 a bottle at dealers or delivered.  
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Write today for Big Illustrated Engine Book "G"



Complete ready to run—fuel tank in base—water cooled—wonderful economy, uses Kerosene or Gasoline—12 sizes, 1 1/2 to 36 H. P. 30 Days Trial  
GRAY MOTOR CO., 771 U. S. Motor Bldg., DETROIT, MICH.



## FARM DEPARTMENT



### Oiling Farm Harness.

First thoroughly wash the harness so as to have it free from sweat and dirt. We find the easiest way to accomplish this is to take the harness to pieces and soak it over night in strong soap suds, having the water as warm as is comfortable to hold the hand in when the harness is first put in. If too hot it will scald the leather. When taken out in the morning most of the dirt is gone, and a little rubbing with a coarse rag will remove the spots that did not soak off.

Neatsfoot oil is, in the long run, the cheapest oil we have ever found for oiling leather of any kind, and especially harness, as it is exposed to the action of dirt, sweat and very often is out in the rain. If the harness is not very dry a half gallon of oil will be enough for an ordinary set of double harness, though we have seen harness so dry that a gallon would be none too much. A nickel's worth of ivory black will give a beautiful color and polish to the leather if it be mixed with the oil before using. Be sure, though, to get ivory black and not lamp black, as the latter rubs off badly. Have the oil warm, and as you take the straps out of the water run them a few times through the oil, wipe off with a rag and hang up to dry. If not then soft enough repeat the operation.

Treat your harness in this way and it looks like new, and if it is oiled about three times a year will outlast three or four sets that never receive any oil. It is an old saying that "five oilings equal a new harness."

this state. But asparagus refuses to grow while the farmer sits upon a nail keg at the village store and chews tobacco while damming the "gold bugs" and hard times. Asparagus is a "queer" plant.

### Horticultural Notes.

It is very seldom that an orchard is cultivated too much. The fault is usually in the other direction.

The hog is an exceedingly valuable insect destroyer among the plum trees, and plums are better than apples for the hog.

Waste and generally unprofitable land can be used profitably in growing chestnuts.

The root louse often causes apple scab, and ashes or lime around the trunk will stop the ravages of the root louse.

Success on any line, as a rule, is the result of study. There is a vast deal of ignorance about orcharding among us. Many farmers grow fruit, or try to, as a game of chance.

When is the proper time to spray an orchard? Spray first when the fruit begins to form or just as the blossom falls. Then about three weeks later.

An experienced berry grower thinks that for strawberries plenty of good stable manure thoroughly fined and incorporated with the soil with a liberal application of wood ashes, will come near meeting ordinary conditions and will bring no disappointment at picking time, if all other requirements are met.

We stir up the soil often in the summer that we may retard the evaporation of moisture but the amount of moisture



Noon Hour Pastimes on the Farm. These farm laborers are whiling away the noon hour with a game of cards. There are many people who do not see the importance of games or amusements. When crossing the ocean I was interested in the games of the men who were employed a large portion of the time in shoveling coal into the great furnaces of the steamship when the temperature was fearfully hot and the work very hard. When they came up out of this inferno, a little healthy recreation was found desirable. It is so on the farm and many other places. There is in fact a place for games and amusements and hours when they should be indulged in. I myself am not a card player.

### Save the Manure.

Did you ever drop a small coin when you were paying for something that you had purchased at the store? Picked it up, didn't you? You bet. Then why don't you save those scores of nickels and dimes that are being washed away from that heap of manure down behind the stable? Every rain washes away a large per cent. of the value of manure that is piled out in the open, says Penna. Farmer.

Manure contains certain fertilizing elements that should be returned to the fields from which they were taken. Of course, you can recruit the soil by plowing under a crop but that is very wasteful when compared with the plan of feeding the crop to the stock and then hauling the manure out to the field.

Use plenty of bedding to absorb the liquids as a large per cent. of the total value is therein. Don't let the manure pile spread all around but keep it piled as compact as possible and always have the pile in the shelter. By all means save every bit of manure you can and apply it to the fields where it will produce dividends in the way of increased crops.

Quite a number who go into fruit culture fail for want of knowing what is best to plant.

A bed of asparagus ten feet square, properly cultivated and managed will afford an ample supply of that delicious vegetable to any family. How many farmers and fruit growers in this state have asparagus beds? Certainly the number is comparatively small, but nowhere does asparagus produce more or better stalks on a given area than in the soils of

checked in this way, is small compared with that which is taken from the soil by an ordinary growth of weeds. Therefore, the killing of the weeds by the plow is of vastly more importance in conserving moisture than is the mere stirring of the soil.

### The Dangers of a Scratch.

Scarcely a day passes that many persons do not, in some way or other, get a scratch, a small cut or a bruise that may break the skin. In most instances not the slightest attention is paid to this beyond the temporary annoyance of the pain and the possible irritation when the hands are put into water, or some subsequent blow in the same spot brings an exclamation on account of the hurt. This, while a common practice, is by no means a wise one. The air is full of floating disease germs, especially the air of cities and towns, and an injury of this sort, be it ever so slight, might furnish excellent breeding ground for some deadly bacteria. It is a good plan always to keep a bottle of prepared carbolic acid and glycerine, and frequently touch all bruises or sore spots with it. This is one of the most convenient and effective germicides imaginable. It is said by excellent medical authority that either this preparation of listerine would prevent half of the contagious diseases that afflict the country. It is believed that many cases of fever and other serious ailments can be contracted by a floating germ coming in contact with the abraded skin.

The Horse.—Age followed age, and the conditions to which the horse had once been accustomed no more returned. He had, therefore, to continue changing, and

he managed in time to drop two more toes, leaving only his middle toe which became inclosed in a tough horny material which we now call the hoof. It was after the horse had completed this change that he and man became acquainted.

At first, men did not consider the horse in any way save as a source of food. They had no thought of harnessing him and putting him to domestic service. But men at that period were not much smarter than the wild animals about them. They were wild themselves, going about in tribes, fighting other tribes and all wild animals. The horse was the victim of large beasts of prey as well as of man. And it has taken hundreds of thousands of years for man and horse to evolve into the respective species we have to-day. Just at what period men stopped devouring the rose and made of him a beast of burden, as well as their best animal friend, is not known.

### Possibilities in Fruit Growing.

Fruit growing offers many rewards in the way of great possibilities to those who get the most out of it. The careful planter and the liberal feeder and culturist as a rule, gets what he is working for.

In all kinds of fruit culture great crops are possible when the circumstances are created to produce them. A well cared for strawberry plantation often yields wonderful results; and the same can be said of raspberries, blackberries, currants, gooseberries, etc., and yet it is not best to engage in fruit culture with that as an incentive. Figure on a fair crop, and if you get a large one, so much the better. I would not be understood to discourage aiming high—not by any means—simply to caution the inexperienced against building on these exceptional yields.

Do not plant too largely, and give what you do plant close attention. We know a man who may not be termed a model fruit grower, yet this man makes the most of what he has, and is successful.

Good varieties, good plants, suitable ground and proper care will produce fine fruit. Economy in labor and land is very essential to success, and yet one must not be penny wise and pound foolish. There must be thorough work done, and plants must not be crowded. It takes some thought and judgment to know just how much work and money to bestow upon a crop to make the most possible profit from it.

It is difficult for the inexperienced to realize the great value of experience in fruit growing. After one has traveled the road he can see the value. To those who are about to establish themselves in this interesting industry, I would say to go slow at first; make small beginnings; gain your knowledge as you go; study your location and soil so that you will know better than any one just what is possible to accomplish with it.

### Queer Poisons in Tobacco.

Chemists say Turkish tobacco contains prussic acid, and Cuban tobacco has another alkaloid called collidine, one-twentieth of a drop of which will kill a frog, giving the creature all the symptoms of paralysis. Experiments have proven that three drops of the liquor that accumulates in the bowl of the pipe will kill a rabbit in nine minutes. A drop of pure nicotine inserted near the conjunctiva of any small animal will kill it almost instantly; eight drops will kill a horse, giving him frightful convulsions. If one drop of the stuff would give a man convulsions one day it would take two the next, four on the third day, etc., which shows how readily the system adapts itself to poison.

### Swallows Nest in Railway Train.

The remarkable, and it is believed, unparalleled, fact of a pair of swallows building in one of the carriages of a local train which made frequent journeys between two local stations in Victoria is recorded.

The swallows, which belonged to the Australian Hirundo neoxena, had built their nests in the under iron frame work of one of the second class carriages of a train running daily from Stony Point to Mornington Junction and back, fifteen miles each way, but occasionally going on to Mornington Station, eight miles further. When examined at Somerville Station early in December the nest contained five eggs, which were then warm. The nest, which appears to have been constructed at Mornington Junction terminus, is stated to have taken five weeks in building. The birds were not seen to be always following the train, but joined it at various points en route.—Australian Emu.

One Dollar will do it. There is a prospect that postage on all periodical publications will be doubled in price. This will prevent some of the liberal offers we are making now of Green's Fruit Grower. At this time we offer you Green's Fruit Grower mailed postpaid Four Years for One Dollar. Delays are dangerous.



### Floriculture on the Farm.

Editor of Green's Fruit Grower:—I am glad to see there is a tendency to grow more flowers on the farm.

Nothing could do more to encourage a love for the work on the farm, and to beautify our rural homes.

A friend says that wherever a cabbage or tomato plant died he filled the vacancy with some kind of flower. Let me tell how I did.

Our garden was near the house and vacant places of cabbage or tomato plants were re-filled with cabbage and tomato plants, until each row was a perfect row of its kind; but we were not without the flowers, for the garden was bordered with flowers on the whole four sides. One side gloried in the gorgeous colors of the nasturtium while the opposite side boasted a row of showy zinnias. The other two sides were bordered with petunias, which were a mass of bloom long after the first frosts came.

At one corner of the garden was a huge stone pile which was intended for building purposes but had not been used. These were a perfect eye-sore to me, until one day a happy thought struck me. Commencing at the edge of the heap I picked up all the scattering stones and threw them on the pile, until with a little rounding up here and there it was in good shape—true and symmetrically formed. I then cleaned and prepared the ground at its base, made a circular bed around the heap and sowed with morning-glory seeds. An excavation was made in the top of the heap, into which a keg was placed, filled with rich earth, and sown with nasturtium in the center and morning glories around the sides.

I was well repaid for my trouble for that stone pile with its mass of vines and blossoms was a "thing of beauty," but, alas, not "a joy forever," for with the coming of autumn the men annihilated the heap and carried off the stones. But it was admired by all who saw it through the summer, and received many words of praise.

So many such unsightly things may be turned to things of beauty, if only a love for the work fills our hearts. A friend of ours who was much annoyed by a large pine stump on one side of her yard, struck on a happy plan of turning the annoyance to a pleasure. Around its base she planted trumpet creepers, and now, though years since it was done, each season finds it decorated with its mass of green foliage and showy blossoms; but nothing is to be seen of the old stump.

In a little town in southern California where a school teacher had talked with her pupils so as to influence them with the thought of beautifying the town, a little incident occurred that shows how much good may be done by teaching in the right direction.

Right through the town was a dry river bed that was fifty feet deep, and was crossed by a bridge, and into that gully had been thrown all the rubbish and refuse of the town. This teacher asked her boys and girls to bring nasturtium seeds and when the rainy season commenced they went down into the gully, and all through and up and down its sides they planted nasturtium seeds, and a gentleman traveling in California says that it was the most beautiful sight he saw in all California, the entire gully being one mass of bloom.

While this is a little digression, it shows how much good may be done in beautifying our surroundings if our influence is cast in this direction.

So many unsightly places might be made "to blossom as the rose," and our rural homes become veritable "Gardens of Eden."—Jennie M. Willson, Mich.

### Essentials in Strawberry Growing.

Professor Lazenby gave the following summary of essential points to be kept in mind:

1. The most profitable varieties for the commercial grower are those not easily influenced by differences of soil and climate. Those which succeed well on wide areas are usually better than those which have a mere local reputation.

2. Pistillate varieties when properly fertilized, are more productive than the sorts with perfect flowers.

3. The value of a variety for fertilizing pistillate flowers does not depend so much upon the amount as upon the potency of the pollen.

4. The flowers of pistillate varieties are less liable to be injured by frost than the flowers of perfect varieties.

5. Varieties that are neither very early nor very late in point of maturity are the most productive and have the longest fruiting season.

6. As a rule, varieties that have the most vigorous and healthy foliage are the most productive, while those with a weaker growth of foliage and a greater susceptibility to leaf blight are usually more prolific.

7. Winter protection may be dispensed with upon well-drained sandy soils, but appears to be a necessity upon heavier ones.

8. The leaf blight may be checked by using the Bordeaux mixture, beginning just as soon as leaves appear, and continuing the application every few weeks throughout the season.

### How Money is Being Made in Buttermilk.

"One by one the various waste products of the farm have been utilized and put into a form having a market value, so it is not surprising to find persons making extra dollars and cents from the sale of buttermilk. An enterprising farmer's wife living near Yates Center, Kansas, is not only deriving a neat income from the sale of her butter, but she also sells the buttermilk to one of the principal hotels of the town for ten cents per gallon, says Farm and Fireside.

"Good buttermilk is a wholesome and refreshing drink the year round, but its popularity in cities is greatest during the summer months, when it is in strong demand at five cents per glass.

"The best buttermilk can be made only from the best and cleanest carefully ripened cream.

"Nowhere can better buttermilk be produced than in the well-kept dairy of a well-managed farm.

"A twenty-pound churning of butter from average cream will make about eight gallons of buttermilk worth from eighty cents up, according to its quality and the kind of a contract one is able to make with local restaurants and hotels. The fresher the buttermilk, the better is its quality and the more refreshing it seems. To build up a reputation for good buttermilk at profitable prices, deliver it promptly in clean cans and as cold as possible."

### Family Washing Hints.

Convenience of arrangement in the matter of wash-boilers, tubs and ironing boards is the first requisite in making the home laundry work easy. The woman who has no wash room, with its stationary tubs, stove and mounted boiler can secure almost the same results by selecting three or four cedar tubs that will fit snugly one into the other when not in use. A bench, the legs of which will fold under, and which can be set away during the week, is the best support for the tubs on wash day. After using, the tubs should be rinsed, nested together and the inner one partly filled with clear water, which suffices for all, says Western Farmer.

To save unnecessary rubbing, the dirt should be boiled from the clothes as much as possible. This is best done by the aid of a simple washing fluid made of one can of pure lye, two ounces liquid ammonia, two ounces salts of tartar; dissolve in five quarts of water, bottle, cork tightly and use one-half cup in boiler at each washing. To assist the fluid it is well to thinly shave a quarter or half bar of borax soap, also, into the boiler. These two form a combination which, with an hour's boiling, removes nearly all of the dirt from the clothes and leaves very little rubbing to do.

The new glass washboards that are now for sale are the cleanest, most durable and the easiest of operation of any other make. They do not crack, rip out and catch dirt as does the zinc-faced kind.

In operating the wringer the washerwoman will make it much easier, both for herself and the machine, by a little careful folding of the clothes to an even thickness before running them through. Lumps and bunches, and the vicious jerks necessary to get them through not only tire the washerwoman, but also wear out the wringer. It is a good plan, after the washing is done, to unscrew the wringer, loosen the nuts and wash and rinse it with clear warm water. Then put a little oil on the bearings and set away in a dry place. A wringer thus treated will not only last two or three times as long, but will be operated with one-half the labor otherwise required.

Make the ironing board with a folding leg and a hook at one end so that it can be hung up where it is convenient. Pad it evenly with a cover of muslin that is easily removed. Arrange the kitchen so that the board can be set up near the stove and an open window on ironing day. The old-fashioned steel-faced sadirons, with reasonably high handles, and in sets of four or five, ranging in weight from four to seven pounds, are the best for the average housekeeper who must do her own laundering.

A blue-flame kerosene-burner oil stove can be bought for \$4. It will keep a set of four irons hissing hot, with little fuel, and without overheating the kitchen. These stoves can be used between ironing days to do much of the cooking. The cost of the oil they burn is no more than that of the wood or coal a stove would consume.

A cheap and very handy sprinkler for dampening the clothes on ironing day is a small watering pot, choosing one with the very finest holes, so that the water can be applied in a fine spray.



H. C. Phelps, Pres.

### Save Big Money on Split Hickory Vehicles Direct From the Factory

All explained fully and illustrated with big photographs in my big new book. It is only a question of good sound judgment to send for this free book no matter where you buy. It will cost you only one penny but it will cost me many pennies to send it to you, but I will take the chance if you are willing, because it is my only salesman and I am sure that I can not only give you a better buggy, but save you a lot of money. Will you write for the book? You are invited to do so. I will pay the postage.

H. C. PHELPS, Pres.  
The Ohio Carriage Mfg. Company,  
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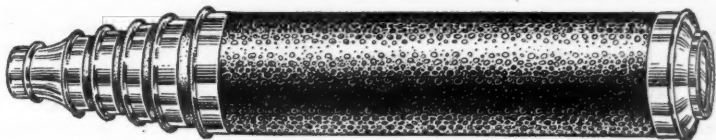
It's the best one I have ever gotten out. It has more styles to select from, both in vehicles and harness. Why try to select a buggy from two or three shop-worn, dust-covered samples, when I will send right to your home a book that shows in big, actual photographs more vehicles than you can find in 20 stores. Local dealers carry only a few styles to select from. I make 125 styles of automobiles, seat buggies, surreys, phaetons, road carts, etc., and a full line of harness. All made-to-order to suit your taste.



Don't You Want a 30-Days' Free Road Test of This Auto Seat Buggy?

When you write advertisers Please mention Green's Fruit Grower.

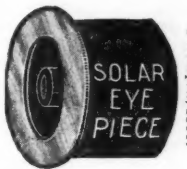
## The New Excelsior Telescope



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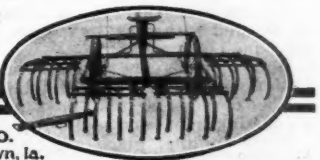
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### COFFEE DRINKING.

#### Are We Coffee Inebriates?

By C. A. Green.

It has been discovered recently that the American people are far greater consumers of coffee than any other people of the earth. This discovery has been made through the efforts of the Brazilian government to control the price of coffee by placing it in storage in this country and selling only such quantities as the demand requires without reducing the price.

Through this system of storage and through a combination of interests, the wholesale price of coffee has more than doubled in the last few years. Previous to this combination coffee was produced at a loss, or at least without much if any profit to the grower. I sympathize with any honorable plan by which the producer of any product may receive a suitable reward for his enterprise and energy. Possibly the manipulators of the coffee crop have gone to the extreme in their method of production.

Coffee is a marvelous stimulant. During the Civil War it was discovered that our soldiers would march farther when stimulated with strong coffee than they would on any other stimulant or food. The fact that the American people use such enormous quantities of coffee indicates that owing to the pressure on their lives they feel the need of a stimulant. The American people are progressing in almost every department at remarkable speed. Foreigners are amazed at the amount of work accomplished by our people by their haste, and some think by their greed for wealth. The fact that we are not the largest consumers of alcoholic liquors is commendable. It is certainly safer, if we must be stimulated to use coffee for that purpose rather than alcohol. But let us remember that we are using a powerful stimulant when we drink coffee, and are using a stimulant that may do us serious bodily injury if carried to excess. If we are coffee toppers, as now charged, we should mend our ways. Much of the coffee served at hotels, on steamboats, railroad trains and elsewhere, is always twice as strong as I can drink it with impunity. Often each cup of coffee will bear reducing with two cups of water for my use. If I drink strong coffee it affects my nerves so that I cannot sleep. You who are strictly temperance people on the subject of alcohol do not forget that coffee is even a greater stimulant. Don't become a coffee toper.

In order to live efficiently, we must keep ourselves physically freshened and mentally poised. The struggle for mere possession of objects should not master completely our time and strength. The daily routine of work may be our immediate interest, but it is not the goal, for all work, play, rest and hospitality should combine to make of the home a suitable fortress of strength to the community, standing for wholesome living, clean ideals and unselfish public service.

#### Making Housekeeping Easier.

Have plain woodwork when it is given you to choose.

Woodwork finished with a good varnish may be cleaned easily with a damp cloth. Have the work table covered with zinc and save scrubbing.

Varnish the shelves after a coat of paint, and they will clean as easily as tiling.

Keep plenty of soft paper to wipe out greasy dishes, pots, and pans, and save the dish washing.

Keep a bundle of newspapers handy to set soiled and smoky pans on.

A window shade fastened to a set of open shelves makes a fine curtain to keep out the dust.

Use a mop with a large dust-cloth and save stooping in dusting floors.

Plan the meals a week ahead, at least and save unnecessary friction.

The areas of travel in the home should be covered with rugs; light ones, easy to dust and clean.

Rubber heels are a great saving of both floors and nerves; yours and others.

The nervous system pays toll alike for jarring sights and sounds.

When ironing, place a folded rug or piece of carpet to stand on. The amount

of ease this will give the feet has only to be tried to be appreciated.

A rug should not extend under the bed, as this complicates cleaning.

Small rugs are best for a bedroom, one before the dresser, washstand and bed are necessary.

Eliminate many of the rocking chairs from the living room and have more room to move about.

Get rid of tufted and cushioned furniture as soon as possible. Dust is the greatest friend of diseases and much of dust lingers in upholstered furniture.

Aside from ventilation, windows are made to look out of and for light to look in. Do not load them with heavy hangings.

Much of the so-called china on plate rails catching dust would look better in a closed closet.

The decorations of the walls in the dining-room are usually considered sufficient ornament.

#### A Plea For More Air.

Having read with interest the letters in the Tribune Farmer, I would like to emphasize what some others have said. One is the value of fresh air and sunshine in the home. Why is it that there is more tuberculosis in the country than in the city? Surely we do not have to economize in that commodity here—open the doors and let the fresh oxygen sweep through the whole house. Blow out the odors of the cooking, and when you come in from outdoors let the air that greets you be as pleasant as that you came in from. The wives are busy in the kitchen, and we find the front rooms closed tightly, shades drawn and maybe blinds drawn. Raise them all high and let in all the sun there is. Carpets are of much less value than good health.

Do all of your housework sitting down that you can. Have a stool of medium height that you can take anywhere, and save your strength to get out of doors. Take walks if you can. If you have children, take them with you. Don't be frightened at stormy weather. Dress for it. Let not a day pass without your being out, and notice the difference in your health—how few colds you have and the good, healthy appetite that follows. It is better to write your name in the dust on the centre table once in a while than to neglect the world out of doors every day. Utilize every way you find to economize work, not thinking you must continue to do it the way "you have always done."

I like to clean house very late, not finishing until July. Then I can give a good shaking up to dust and bugs. This makes cleaning in the fall a very small affair. Then these pleasant spring days when neighbors are busy at work I can be out enjoying the sunshine and starting the garden.

All who have access to a cream pail will find cream much better and healthier to use for shortening than anything else. Those who make brown bread will find they can make a nice loaf from equal parts of graham and rye flour. I use a great deal of rye, and think it is a nutritious flour. It makes nice gems, especially when we can go to that cream can.—Myrtle C. Rice.

#### Oilcloth Apron.

One of the greatest savers of soiled clothing to the housewife is an apron made of white oil-cloth. It saves the dress from all soil and dampness and needs no laundering. I have one made from one yard of lightweight oilcloth and bound with a blue tape. I bound it in a color, as the tape of white would soil. It is neat and tidy looking, and when working around a gas or other range, it reduces the likelihood of the wearer catching fire when leaning over the range to light cooking utensils. When washing it is indispensable.

#### Stubborn Fruit Stains.

Old fruit stains must be treated with oxalic acid. Dissolve three ounces in a pint of water. Soak the stain in this solution five minutes, then steam by holding over a kettle of boiling water, or hang in the sunshine. When the stain disappears, rinse in ammonia water so as to counteract the action of the acid. Rinse well in clear water so that the fabric will not be injured, then spread on the grass or hang in the sun to bleach and whiten.

#### Be Glad.

Written for Green's Fruit Grower.  
By Elizabeth Evelyn English.

Is your heart with anguish throbbing?  
Does some sorrow crush your soul?  
Do the years drag slowly onward,  
'Ere you reach your shining goal?  
Love, and fame, and fortune vanished—  
Hope on, Heart, tho' crushed and sad;  
Tho' unseen, the Sun is shining—  
Be glad.

Tho' the clouds are grey and heavy,  
And your earthly joys are few;  
They're but clouds, soon all must vanish,  
And the Heav'n itself, is blue.  
Tho' the days drag thro' in sorrow  
O'er the joys you might have had;  
Vesper-song will come at even,  
Be glad.

Should you spill hot fat on the floor, or on a wooden table, pour cold water upon it at once. It can then be more easily scraped off, not having had time to sink into the wood.

Choosing Broom.—A heavy broom should be chosen for thorough sweeping in preference to a light one, for the weight adds to the process, says an exchange. Test a new broom by pressing the edge against the floor. If the straws bristle out and bend the broom is a poor one and should be rejected; they should remain in a firm, solid mass.

#### Farm Cookery.

Chicken Croquettes.—Chop cold boiled chicken very fine, season to taste, add a little minced onion, and moisten with a little thick white sauce. Form into croquettes, dip in beaten egg, then in bread-crumbs, and fry in boiling fat to a pale brown. Veal is also very nice for croquettes. If the supply of meat is insufficient, mix with it any cooked minced vegetable which combines nicely, or stale bread-crumbs, and one or two well beaten eggs to give richness.

Salmon Rolls.—Mix the salmon with one-half the quantity of mashed potatoes or bread-crumbs, season to taste, add one or two tablespoons of grated cheese and a beaten yolk of egg. Form into flat rolls and brown in hot butter. Canned salmon does nicely for these.

Breaded Potato Balls.—Mix the well beaten yolks of two eggs into one quart of light mashed potatoes, season rather highly, and add two teaspoons of minced parsley, one teaspoon of minced onion, and one-half cup sweet cream. Mold into small balls, roll in beaten egg yolk, then in buttered crumbs, egg and bread-crumbs a second time, and bake in a hot oven until delicately browned.—Farm Magazine.

Damage to apple leaves and fruit by the use of Bordeaux mixture in spraying for fungous diseases is a question of climate. Don't use it when the leaves are wet from dew, fog or rain or in the middle of the day when it is hot and there is a strong breeze.

#### The Winter Banana Apple.

May 1st. Eating Banana Apples today. These were kept over winter in common barn cellar. Beautiful golden with a great patch of rich deep pink on one side covering above one-third of the apple. I am expecting that the time will come when orchardists will be falling over each other in the rush to procure Winter Banana apple trees. In European markets in December and January boxes of 40 lb. weight of Banana apples sold at \$4.50 per box while 150 lb. bbls. of the old standard varieties sold at \$4.00 per bbl. at the same market.

If I had the time and the capable men this week I would plant ten acres of Winter Banana apples this week.—E. H. Burson.

#### Potatoes From Seeds.

Mr. Ed. E. Rich of Cedar Falls, Iowa, desires to have you put the following experience of his in the Fruit Grower and send him a copy:

In 1911 he raised a potato plant from the seed, starting it in a greenhouse in March, then transplanting it outdoors where it grew till killed by the frost in the fall. The top grew to be six feet long and had 20 or 30 seed balls, which he is using for seed this year and which are doing splendidly. His largest potato last year weighed 6 ounces, and a total of 26 large potatoes weighed 3 3-4 lbs. This would average 375 bushels to the acre.

Did you ever hear of so large a yield from seed?

#### "Fun On The Farm."

Some say that farming is all hard work, but C. A. Green did not find it so. Both he and his city wife were never happier than during the years spent on a farm near Rochester, N. Y., which they converted into a Fruit Farm. C. A. Green's booklet, "How I Made the Old Farm Pay," gives a full account of their experience. Price postpaid twenty-five cents.

## FREE

### A Big Talking and Sleeping Doll

I want to send every little girl a Speaking and Sleeping Doll. She will say "Mama" and "Papa" as plain as a real little girl. The prettiest, daintiest and sweetest Doll you ever saw. Stylishly dressed; lace trimmed hat and gown, shoes and stockings. 17 inches tall. Pretty head. Long golden curls, shuts her eyes. Just your name and address and say you want a "Mama" and "Papa" Talking Doll and I will tell you how to get her. NOT ONE CENT OF YOUR MONEY IS REQUIRED UP-TO-DATE. Dept. 38 Indianapolis, Ind.



#### PARKER'S HAIR BALM

Cleanses and beautifies the hair. Promotes a luxuriant growth. Never fails to Restore Gray Hair to its Youthful Color. Prevents hair falling. 50c. and \$1.00 at Druggists.

## CARDS

W. A. Bode, Expert Penman, Box 177, Fairhaven, Pa.



## Why bother to raise so many "good things" unless—

—Unless you save them. Your wife can "put up" many kinds of fruit. But it isn't so easy to "can" vegetables.

Not—if she depends on old-style, narrow-necked, tin-topped, screw-capped jars, that take in only small fruit. This year find out the better way to "put up" fruit—and vegetables, too—the

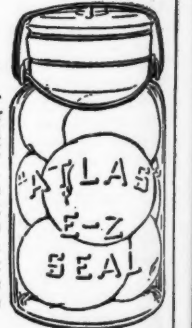
## E-Z SEAL JARS

This is the all-glass jar, with the all-glass cap—no metal to taint the fruit—no twisting and turning. No shattering, no splattering. Easy to fill, easy to seal, easy to open and clean.

Don't allow good garden stuff or fruit "to go to waste." You may be sure it will keep—vegetables and fruit will not spoil in these air-tight, all-glass sanitary jars.

### Free Jar—Free Book

Cut out this coupon, take it to your grocer—he will give you one E-Z Seal Jar—FREE. Be sure and write us for FREE Book of Recipes—it tells many things you should know. Get the Jar from the grocer. Get the Book from us.



HAZEL-ATLAS GLASS COMPANY  
Wheeling, W. Va.

### 1-Qt. E-Z Seal Jar CI FREE for the Coupon

Please note—in order to secure free jar this coupon must be presented to your dealer before Sept. 1st, 1912, with blank spaces properly filled out.

HAZEL-ATLAS GLASS CO.,  
Wheeling, W. Va.

This is to certify, that I have this day received one "Atlas" E-Z Seal Jar Free of all cost and without any obligation on my part. This is the first coupon presented by any member of my family.

Name \_\_\_\_\_

Address \_\_\_\_\_

TO THE DEALER:—Present this to jobber from whom you received E-Z Seal Jar. All coupons must be signed by you and returned before Nov. 1st, 1912. DEALER'S CERTIFICATE. This is to certify, that I gave away one "Atlas" E-Z Seal Jar to the person whose signature appears above.

Dealer's Name \_\_\_\_\_

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Patterns for Women Who Sew.

5852—Ladies' Five Gored Skirt Closed at Front. Cut in 5 sizes 22 to 30 inches waist measure. Size 24 measures 2 1/2 yards around lower edge and requires 3 1/2 yards of goods without up and down 3 1/2 yards of 36 inch wide. Price 10 cents.

5853—Ladies' Dress with or without Plastron—Three Piece Skirt. Cut in 6 sizes 32 to 42 inches bust measure. Size 36 requires 4 1/2 yards of 36 inch goods with 1 1/2 yards of 22 inch all-over and 5 1/2 yards of banding. Price 10 cents.

5854—Girls' Dress Closed at Front. Cut in sizes 6, 8, 10 and 12 years. Age 8 requires 3 yards of 36 or 2 1/2 yards of 44 inch goods; 3/4 of a yard of 27 inch contrasting goods. Price 10 cents.

5855—Ladies' 28 Inch Length Coat. Cut in 6 sizes 32 to 42 inches bust measure. Medium size requires 2 1/2 yards of 50 inch goods; 1/4 yard of 24 inch satin. Price 10 cents.

5856—Ladies' Yoke Shirt Waist Having Peplum. Cut in 5 sizes 32 to 42 inches bust measure. Size 36 requires 3 1/2 yards of 27 inch goods with 3 1/2 yards of plaiting. Price 10 cents.

5857—Ladies' and Misses' Guimpe Chemisette and Half Sleeves. Cut in sizes small, medium and large. Requires for guimpe 1 1/4 yards 36 inches wide, for chemisette and half sleeves 1 1/2 yards of 18 inch net. Price 10 cents.

5858—Ladies' House Dress, with Detachable Three Piece Skirt. Cut in 6 sizes 32 to 42 inches bust measure. Size 36 measures 2 1/2 yards around lower edge and requires of goods without up and down 4 1/2 yards 36 inches wide; 1/4 yard of 27 inch contrasting goods. Price 10 cents.

5859—Ladies' Waist Closed at Back. Cut in 6 sizes 32 to 42 inch bust measure. Size 36 requires 2 1/2 yards of 36 inch goods with 3/4 yard of 18 inch all over tucking. Price 10 cents.

5860—Ladies' Three Piece Skirt—For Bordered Goods Only. Cut in 5 sizes 22 to 30 inches waist measure. Size 24 measures 1 1/4 yards around lower edge and requires 3 1/2 yards of 36 or 45 inch bordered goods. Price 10 cents.

5861—Girls' Tunic Dress—Four Gored Skirt Joined to a Guimpe. Cut in sizes 8, 10, 12 and 14 years. Age 8 requires 2 1/2 yards of 36 inch goods

for tunic and skirt and 1 yard of same width for guimpe. Price 10 cents.

5854—Ladies' Sailor Waist with Peplum and Long or Short Sleeves. Cut in 6 sizes 32 to 42 inches bust measure. Size 36 requires 2 1/2 yards of 36 inch goods; 3/4 yard of 27 inch contrasting goods. Price 10 cents.

5855—Ladies' Dress with High or Low Neck and Three Piece Skirt. Cut in 6 sizes 32 to 42 inches bust measure. Size 36 measures 2 1/2 yards around lower edge and requires 3 1/4 yards of 27 or 4 1/2 yards of 36 inch goods; 3/4 yard of 27 inch contrasting goods. Price 10 cents.

5408—Ladies' Four Gored Skirt. Cut in sizes 22 to 30 inches waist measure. Size 24 measures 2 1/2 yards around lower edge and requires 4 yards of 36 inch material. Price 10 cents.

5853—Girls' Empire Dress, Closed at Back—Suitable for Flouncing. Cut in sizes 6, 8, 10 and 12 years. Age 8 requires 4 1/2 yards of 20 inch wide embroidered flouncing; or 2 yards of 36 inch plain goods. Price 10 cents.

5843—Ladies' Breakfast Jacket with Body and Sleeves in one. Cut in sizes 32, 36 and 40 inches bust measure. Size 36 requires 2 1/4 yards of 36 inch goods; 3 yards of edging, 1 1/4 yards of banding. Price 10 cents.

Order patterns by number, and give size in inches. Address Green's Fruit Grower Co., Rochester, N. Y.

AUNT HANNA'S REPLIES

Is Integrity of Character Appreciated?

We have been told over and over again that goodness is appreciated, that no person need have fears that he or she will not be understood and esteemed at full worth. I beg to differ from these optimistic individuals. I have had considerable experience with life and find that lack of appreciation is one of the great failings of mankind. It is the showy, brilliant, dashing individual who is apt to be looked up to, rather than the person of sturdy integrity, who acts solely on principle.

To illustrate this point I will tell you of two daughters, young women of marriageable age. One of these girls was most remarkable in many ways, unassuming, truthful, capable, willing to sacrifice herself to the death for others, while the other was more beautiful, more brilliant, more fascinating on short acquaintance, and possibly more polished.

A certain clergyman, who fully appreciated the good qualities of the plainer girl, was approached by a worthy gentleman seeking a wife and asked whom he could recommend.

This clergyman in reply said he knew of just the girl who would make him one of the best wives on earth. The clergyman, after the usual formalities, introduced this worthy man into the home of these two daughters, but did not deem it necessary to point out to the wife-seeker which of the two he so greatly admired, deeming it unnecessary, and thinking that no person would make a mistake by picking out the wrong girl. The possibility of such an erroneous selection did not occur to him.

After several months the clergyman met the wife-seeker and inquired as to his opinion of the young woman to whom he had introduced the man.

"She is an angel," was the reply. "She is the noblest, truest, most beautiful woman on earth. I shall always owe you a debt of gratitude for introducing me to such a loving character."

"I am delighted that you should appreciate this girl. I was sure you would," replied the clergyman.

"I do not see how anyone could help appreciating such a lovely character," replied the friend, "For Julia is the most charming of women."

"Julia!" exclaimed the clergyman aghast with astonishment: "You don't mean to tell me that it is Julia you have fallen in love with?"

"Why certainly," was the reply. "Whom did you expect I would fall in love with?"

There are numerous instances occurring daily similar to the above. The showy, superficial, selfish, shallow character is given preferment over the substantial, sincere, earnest soul seeking to do something for others rather than to gather pleasure for herself.

Take the case of the belle of a village or city, the most beautiful and graceful, the one with the most winning ways, fetching smile, coquettish eyes, with bewitching hair, fine eyebrows, shell-like ears and fairy hands. Nature does not give one individual all of her favors. She gives to this girl beauty and witchery of manner, and her worshipers are many. She gives to the other girl good sturdy common sense, executive ability, ability to accomplish things. She is a good cook, a good house-keeper, an agreeable, self-sacrificing companion, but this plainer girl is abandoned in almost every instance and the bright young thing is exalted in the highest.

Consider for a moment the kind of man that the average church seeks as a pastor. In the first place the church wants a young man. The aged man is not generally wanted, no matter how talented, how self-sacrificing or how worthy he may be. When looking for a new pastor does the church inquire first whether this candidate

is faithful to the sick or afflicted of his flock, or to the poverty stricken, or those who have been afflicted by the death of a friend? No, the main question is "Is this man eloquent and will he attract a large congregation?" It does not require a man of great depth or breadth of character to be eloquent. Many of our most eloquent men have been shallow characters, able to express themselves, able to tell more than they actually knew. Showy men are wanted on the platform, men who attract attention. The modest, retiring competent student is likely to be overshadowed by his more brilliant but less capable brother.

Often polish, culture, repose, tact and grace are misjudged, and the individuals possessing these qualifications are rated far higher than others who for substantial merit and integrity of character would outweigh the other one hundredfold in the scales of equity.

How frequently the strong member of a family, the one on whom the greatest responsibility rests and who is really the builder on whom the families social, intellectual and financial standing rests, is overlooked by one of the family more brilliant or dashing but far less substantial and worthy of credit. It is only when such a worthy individual dies that his family or friends begin to thoroughly appreciate him.

Assume that you, my friend, are one of the class who is not appreciated, and there are many such in this big world, do not expect full appreciation but learn to take a large part of your pleasure in life through the feeling that you are worthy of appreciation. Here is the gist of the entire question: you must live with yourself. If you make of yourself a worthy individual, you are living continually in good society, but if you are a sneak, a miserable apology for a man or woman, insincere, deceitful, frivolous, you cannot forget that you are continually living in poor company, that is with yourself.

Rules for Kissing.

Dear Aunt Hannah:—Could you see any reasonable excuse for a girl not allowing a boy to kiss her good-night upon leaving, when the girl had known the boy for eight or more years and had kept company with him several different times.—A Subscriber.

Aunt Hannah's Reply: No boy or man has any right to kiss a girl unless he is en-

gaged to be married to her, and no girl should allow such familiarity unless she is engaged to be married to the person who would do the kissing. A girl loses her chances of marrying the right man by allowing him to take such liberties before engagement of marriage, for the man who solicits the kissing will think less of the girl who allows herself to be kissed before her lover has the right to ask for those kisses. There are many foolish girls who think directly the opposite, imagining that they will lose the young man if they do not allow him to kiss them. This is a great mistake, a wrong assumption, and you may take the word of the wise women of the world varying on that subject. This boy is likely to say to himself: "If she allows me to kiss her without an engagement of marriage, she will probably allow others to kiss her, and I do not want to marry such a girl as that."

Painted Women.

Being an old-fashioned woman. I delight in seeing the faces of girls and also mature women looking as nature made them. When I was a child I cannot remember ever seeing a girl or a woman with a painted face, therefore I am persuaded a change has come over the race during the last decade. While the painting of women's faces, lips, eyebrows and eye lashes occurs now frequently, as may be seen by the promenaders on our city streets. I cannot say that I see such exhibitions often in the rural districts, but I do occasionally see a farmer's wife with a complexion that is borrowed from the paint pot.

It is not a pleasant sight to see a painted face either on man or woman. When I was younger and occasionally attended the circus, I saw there the clown always with a painted face, but never with a thought that the paint added anything to his attractions. The woman who paints does not do it to please her husband or her own children or other members of her household, for she must constantly appear like a fright to them, for often at home she must appear without artificial coloring, and as continuous painting destroys the natural complexion, she cannot to her own family be what Keats would call "A thing of beauty and a joy forever."

How strange it is that a young girl with a good natural complexion should seek to disfigure herself by applying grease paint to her face and lips.

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## Chickweed in Strawberries.

Written for Green's Fruit Grower  
By B. B. Robb.

Keeping chickweed out of strawberry patches probably is the greatest problem the strawberry grower has to face today. This has been one of the leading questions since strawberries have been grown commercially.

In the first year, as a rule, chickweed is not bothersome, but late in the fall after the hoeing and cultivating are discontinued, or early in the spring when it is impossible to cultivate, the pest makes its appearance.

There are two types of chickweed. One has a smooth leaf, is light green in color and attains a very rapid growth; the second is more stocky, having a long, hairy, dark green leaf, and this type has a tendency to grow more in bunches than does the former, thus making it easier to clean out by hand. The first type is the hardest to combat, and at the same time is the most common. Both types will succumb to the same treatment.

Chickweed is a plant which thrives best in wet weather, and of course is seriously damaged by drought. Where it grows in a thick mat within the row, it will hold the moisture collected during the night or from a rain until 10 or 12 o'clock in the day. This causes much injury both to green and ripening fruit.

As has been stated, during the first summer while the strawberries are being hoed and cultivated, the chickweed does not become a source of extraordinary annoyance, as it is rather a tender plant and cannot stand much disturbance. During the fall the plants get so thick in the rows that it is impossible to use a hoe to any advantage. Now is the time the little chickweed makes its appearance, especially if the fall is a wet one. As soon as the chickweed plant has reached a height of about two inches it begins to branch out, covering the strawberry plants and producing seed in abundance which, falling to the ground, germinates immediately, growing up through that already in evidence. This, of course, produces a thick mat which will choke out any other growing plant. The prevention of this, to a certain extent, is by hoeing dirt onto the row in the early fall, to break down and cover the little chickweed plants. At this season strawberries will stand considerable dirt covering and still grow upwards through the dirt.

A small amount of chickweed really is a good thing in a strawberry patch during the winter, but only a small amount, because it would not be wise to have enough so that the berry plants would be smothered. A little of the chickweed plant prevents heaving, and is more or less a sort of cover crop or protection against the cold winter weather.

Now comes the real problem, how to get rid of the chickweed, which has been a good thing during the period of low temperatures, but which in the spring becomes a nuisance. Hitherto there has been no other method than the laborious one of having the grower get down on his hands or knees and pull it out with his fingers. Already I have shown how it can be controlled the first year, perhaps leaving enough for all the good effects during the winter. But during the warm spells in the winter season chickweed grows rapidly, especially early in spring. So I have carried on investigations on spraying chickweed in the spring with sulphate of iron to meet this situation.

These experiments were undertaken at Webster, N. Y. It was known, to begin with, that sulphate of iron would kill chickweed and strawberries as well. Thus the object of the experiments was defined if possible to a time when the berry patch might be sprayed to kill chickweed and leave the strawberry plants uninjured, also to discover what strength of sulphate of iron solution would be most effective. Three solutions were employed as follows: One pound to a gallon of water, one and a half to a gallon of water, and two pounds per gallon of water, which we will call respectively 10, 15 and 20 per cent. solutions. Each solution was applied to two small plots. The first plot was sprayed thoroughly, but not overdone, while the second plot was drenched. The first spraying was done April 3, 1911. The last snow was just disappearing. The second spraying occurred about a week later and the third just before the blossom buds appeared.

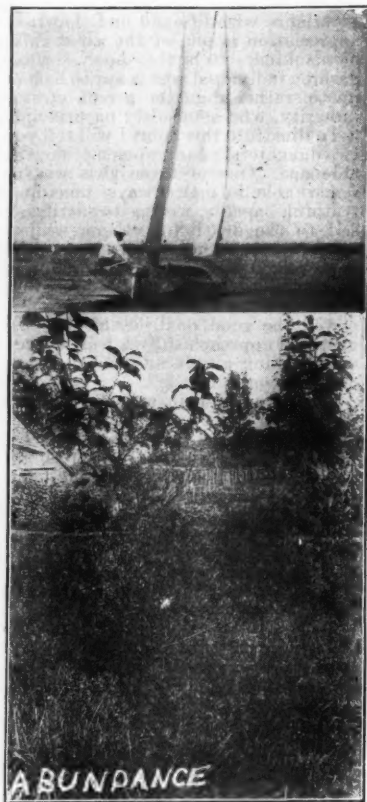
The results were that on the first spraying the 20 per cent. sulphate of iron solution killed all the chickweed and took all the leaves off the strawberry plants as it did all the others, but it did not kill the plants. They soon came on fresher and greener than before. The 15 per cent. solution killed most of the chickweed and the 10 per cent. solution, some of it only. There were no benefits from drenching the plants with the solution, thus showing that the making up for lack of strength of solutions by applying an extra amount cannot be accomplished.

Chickweed came up from seed and covered the ground before the end of the blossoming season. Thus while the spraying was effective it was done too early.

The second spraying produced about the same results as the first. It of course caught a week's additional growth of chickweed.

The third spraying was the one which produced the most effective results showing that the 10 per cent. solution is not quite strong enough, but that the 15 to 20 per cent. solution is about right. All the leaves of the plants were taken off as in the previous experiment, but the crowns were uninjured even where drenching was resorted to. The time of blossoming was delayed probably from four days to a week. This will vary with the time of spraying and the season. If the weather is clear and sunshiny the chickweed will be killed in two or four days, and the strawberry leaves will be black and the whole patch will look as though it had been burned. As the crowns are uninjured fresh green leaves soon appear. They grow exceptionally fast, shading the ground so that the chickweed does not re-appear to any extent.

As previously observed, it is not possible to make a 10 per cent. solution of sulphate of iron equal to a 15 or 20 per cent. solution by applying an extra amount. Either a 15 per cent. or 20 per cent. solution must be applied evenly and just enough thoroughly to wet all the chickweed through to the ground. It may be applied with a broadcast sprayer, carrying a nozzle over every row. In these experiments,



In the upper photograph an editor is taking a sail on Lake Ontario. It is ticklish work unless you understand sailboats. In the lower picture you see an Abundance plum tree recently transplanted, which is loaded down with beautiful and fine tasting Abundance plums, one of the Japanese plums, among the first to be introduced to this country, and still very popular.

however, a handpump and a "Tiger" nozzle were used. This combination gave a very fine, forceful and effective spray. No chickweed will be killed below where the spray goes. I do not think a sprinkling pot would be satisfactory? In a day or two after the spray is applied the patch should be gone through and the thick bunches of chickweed raked off with an ordinary garden rake or similar tool. Otherwise it will die down, forming a dense mat and will smother the plants beneath it.

## Value of Forest Cover.

The chief hydrographer, who has just returned to Washington from the White mountains, states that the general difference between snow depth and stream records is so marked as to make the conclusion almost inevitable that forest cover is necessary to the uniformity of stream flow. On April 25th snow depths averaged two feet in the forest and less than half that on cut-over areas at the same elevation. Thus the results of expert investigation tend in every instance to establish the theory that the forests are essential factors in the conservation and distribution of moisture.—Boston Transcript.

Hiram—Them's awful puny little plants you've got in your garden. Are you sure your seed was good?

Suburbs—Good! Why say, the chickens were crazy about them.

## To Get Rid of Mosquitoes.

Frank Parker Stockbridge in World's Work for May has an extended article on mosquitoes, which I condense for "family use."

If bitten by a mosquito, wet your toilet soap and rub it on the wound, says Dr. L. O. Howard, U. S. chief entomologist.

To keep them off, rub hands and face with a lotion of two parts oil of citronella, two parts of spirits of camphor and one of oil of cedar. Mixing this lotion with liquid vaseline will retard its evaporation. A few drops of this mixture on a towel hung over the head of the bed will keep them away through a night.

Better still—catch them. They are most active after dark, resting by day. It is easy to find them on ceilings or light walls.

Better and best, fumigate. Persian insect powder when fresh is very efficient. One pound will pervade 1,000 cubic feet space. Heap it in a cone and ignite at top. It burns slowly and makes a dense smoke. If you wet the powder and mould into cones and burn when dry again, you economize powder. This smoke stupefies mosquitoes. They fall and can be swept up and burned. Mimm's Culicide is also good. Equal parts by weight of carbolic acid crystals and gum camphor. Pour melted crystals over gum camphor and the result is a clear liquid which can be kept in a glass jar; three ounces of which placed over a lamp or other moderate heat will yield a vapor sufficient to kill all the mosquitoes in a room of ordinary size.

The state of New York, with an apple crop of more than 25,000,000 bushels in 1909, valued at upwards of \$13,000,000, seems to be holding its own fairly well against the competition of the much vaunted apples of the Northwest.

Deer.—Hundreds of wild deer have been killed by the unprecedented floods in the Mississippi Valley, hundreds more are starving in the overflowed territory. On two mounds in the submerged Sunflower River district near Vicksburg 170 deer are marooned, and the game protectionists of that locality have appealed to the American Game Protective and Propagation Association to dispatch its agents to the rescue. In a sense, wild beasts have a better chance of survival from natural dangers than before civilization overtook them.

In masticating crackers 12 times more saliva is required than when eating apples.

Cityward.—It is not so much because the farmer's boys sought the cities as because his daughters refused to stay on the farm that the rural population has dwindled. At least, the Council of the National Banker's Association, in session in Westchester last week, came to the conclusion that the greatest drawback to inducing men to undertake farm work lies in the objections made to it by the womenfolk. The work in farm households is undeniably heavy. One remedy proposed, and already in operation in some of the Western States, is a co-operative chain of laundries. They carry off the week's wash and return it at trivial cost—ten cents is the carrying charge, according to report—thus saving one day's hard labor for the women.

Hook—The big men always get to the top don't they?

Cook—Yep. The same as the big strawberries in a farmer's crate.

## Thoughts.

"The aim of all intellectual training for the mass of the people, should be to cultivate common sense."—J. Stuart Mill.

"Women will find their place, and it will neither be that which they have held nor that to which some of them aspire."—Huxley.

"Greatness has almost invariably been the outgrowth of country breeding, polished in after years by city life. There is no place better to begin in than the country, just as there is no place better to end in than the city."—Dr. George F. Shady.

"In this vast workshop of life, with its dust and sweat and din, it is the worker that is perfected oftener than the work, and when some bit of perfection emerges from the turmoil, it not only explains and justifies the toil behind it, but takes on a beauty which is half a prophecy."—H. W. Mabie, in the Outlook.

"If the boys keep on letting the girls beat them in the school, the gymnasium, the office, and, may be, even at the polls, the inherent notion of women that they must have a husband whom they may look up to, will make them wait a long while before they will stoop down and pick one up."—Cordelia Reade, in New York Press.

Labor and other expenses are increasing so that we may not long be able to offer to mail you Green's Fruit Grower postpaid. Four Years for One Dollar. But we will do it now. Send us the Dollar.

Editor you tell me die off?

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Prof. Van I a variety of fill in this v berries also. any that do each winter, I am able to g spring again have all died It can not have seen it times. But i tion of cold ni bright, sunny winds after a I have see split from top off within a v frost in the fell off.

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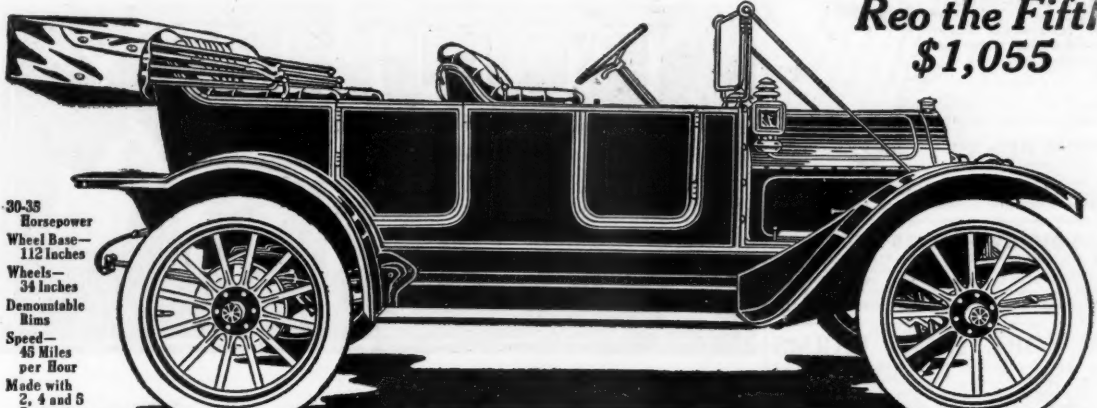
Editor Geen's Fruit Grower:—Could you tell me what makes my grape vines die off?  
I have some forty-five vines; Concord, Niagara and Chas. A. Green's "White". For the last 3 or 4 years, I have been losing from 8 to 10 every summer. They commence to die off after they have shoots from 8 to 10 inches, and are dead within two or three days.  
I have just now two of them, one Niagara and one Chas. A. Green's "White" in the same way. I have good soil, well fertilized, a little high elevated and tiled.  
Have been spraying for the last six or seven years according to Green's Fruit Grower Calendar.—Wm. Schafer, O.  
Reply: There may be borers at the root, for such insects occasionally do such damage. Or, it may be that there is something wrong with the spray mixtures used and that they injure them. Send samples to the experiment station at Wooster and tell all the facts to the officials there. This is easily done and they are willing and probably able to locate the trouble.

Please, tell us in the Fruit Grower what is the cause of plum trees sprouting below the bud and how to prevent it. How can one tell when lime-sulphur has deteriorated beyond effectiveness by reason of the barrel taking air?—Frank Myers, Ohio.  
Reply: Plum trees that sprout below the bud have, probably, been worked on some kind of root that is subject to sprouting. Or, there may be some kind of disease in the trees or uncongeniality of the stock and bud. It might be well to call this matter to the attention of the experts of the experiment station at Wooster and have them make a personal inspection. Without seeing the patient it is hard to properly diagnose a case and even then it is not always done or the remedy given.  
The only way I could suggest to determine when a barrel of lime-sulphur had lost some of its effectiveness is to try it.

Best Locality For Health and Fruit.  
Editor Green's Fruit Grower:—I have been reading the Fruit Grower for some time and I understand that you are pretty well acquainted with the climate and soil of most of the states in the Union. For the past several winters I have been troubled a great deal with bronchitis and catarrh and I feel that I must spend the winters and also the springs (which are often very disagreeable here) in some milder climate. I have studied Florida a good deal but I know that the soil of Florida is very poor generally and I think the summers are pretty enervating and if possible I would like to go to some state where I could reside comfortably the year round. How are the climate and soil of Arkansas? Have you ever been there? I would like to reside in some good agricultural and horticultural locality and would not wish to leave Ohio if I did not think I could better my condition elsewhere.—John Stumpf, Ohio.  
Reply: Arkansas has about as changeable a climate as any part of the country, and while it is milder than that of Ohio it is not very favorable for people with asthmatic troubles. I have been there at different seasons of the year and there are different kinds of climate there at the same time of year. The mountain region of the northwest section of the state is the healthiest and most desirable for making homes. The swampy regions have richer land and more that is tillable, except in times of flood. I would suggest southern Colorado or New Mexico for a mild and healthful climate, but there are some disagreeable conditions there such as rather long, hot summers and lack of good irrigating water in some places. But it is a desirable state in which to live, especially for those with breathing organs. Splendid fruit, vegetable and grains are grown there.

Colorado Experience.  
Prof. Van Deman.—I wish I might find a variety of grape that would not winter kill in this vicinity. Black and red raspberries also. I have been unable to find any that do not kill down to the ground each winter, despite any or all protection I am able to give them. The berries often spring again from the roots, but grapes have all died outright.  
It can not be from extreme cold for I have seen it colder in Kansas, than here, times. But it seems to be the combination of cold nights following so often after bright, sunny days of dry air and strong winds after a first sharp freeze.  
I have seen the bark of raspberries split from top to root and curl up and peel off within a week after our first killing frost in the fall, even before the leaves fall off.  
Is there any way such operations can be prevented? It is needless to say that such stalks were dead.  
I find many such problems here that never troubled us farther east.  
Another puzzle is rhubarb. It does quite well for about two or three seasons, then tries to bloom. When these buds are

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Horsepower  
**Wheel Base—**  
112 inches  
**Wheels—**  
34 inches  
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Rims  
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46 Miles  
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Top and windshield not included in price. We equip this car with mohair top, side curtains and slip cover, windshield, gas tank and speedometer—all for \$100 extra. Self-starter, if wanted, \$20 extra.

## The 1912 Sensation

By R. E. Olds, Designer

### Five Times Oversold in May

I have built automobiles for 25 years. Reo the Fifth is my 24th model.

I have watched all the ups and downs of Motordom—all the comings and goings, the successes and failures.

But I never saw a demand like that which developed for Reo the Fifth this year. In April and May we could easily have sold five times our factory output.

#### My Final Car

Month after month I have told you the story, so you know why this call has come.

I built this car as my final creation, as the cap-sheaf of my career.

In this car I embodied the best I had learned from 25 years of car building.

This car marked my limit. Every detail showed the best I knew.

I analyzed all steel that went into it. I tested the gears in a crushing machine with 50 tons' capacity.

I used Nickel Steel axles—Vanadium Steel connections. I equipped the car with 13 Timken bearings.

To every part I gave big margins of safety. The carburetor I doubly heated for low-grade gasoline.

#### I Watched It

Then I took personal charge of the building, for I pledged my good faith on this car.

I saw that the parts were ground over and over, until we got utter exactness. I saw that each car got a thousand inspections.

The engines were tested for 48 hours. Each finished car was tested over and over, until it proved utterly perfect.

We did all this with every car, in the midst of the April rush. We do it today, and shall always do it so long as I build this car.

#### The Center Control

Then we equipped this car with my new center control. All the gear shifting is done by a small, round lever between the two front seats. It is done by moving this lever only three inches in each of four directions.

I got rid of all side levers, so the front doors were clear. Both brakes are operated by foot pedals.

In these ways I made possible the left-side drive.

Now nearly all makers announce for next season the center control and the left-side drive. But none can use my center control. They still use the old time levers.

#### The Amazing Price

Then we offered this car—the best I can build—for \$1,055. And nothing on the market could begin to compete with it.

The car is long, roomy and powerful. The wheels are big. The body is finished in 17 coats. The upholstery is the height of luxury.

The demand for this car will grow and grow as the facts become better known. I believe that each car will sell twenty.

But the price of \$1,055 can't last long. The price is too low for profit, and materials are advancing. Before very long advancing costs will compel us to ask something more for this car.

#### 1,000 Dealers

Reo the Fifth is shown by dealers in a thousand towns. If you will write for our catalog, showing the various styles of body, we will tell you where to see the car. Address

**R. M. OWEN & CO., General Sales Agents for REO MOTOR CAR CO., Lansing, Mich.**  
Canadian Factory, St. Catharines, Ont.

pulled or cut out, it splits into many smaller "heads" for growth and the number increases while the size of stalks diminish very rapidly, in spite of frequent division and liberal manuring, and in a year or two the roots rot away entirely. Can you advise as to this? I would like to raise rhubarb as it is so good a substitute for fruits that are so late in ripening in this altitude, 7000 feet.—Mary E. Lester, Colo.

Reply: It is probable that the trouble with the berry bushes and grape vines comes from too late irrigation and a sappy growth, which the wintry spells in the fall catches in a tender condition. If the growth was caused to ripen early by giving little water after September first and then laying down the canes and vines and covering with earth as soon as the leaves fall, it is likely that there will be little or no winter-killing. At least, I would try this plan. I have seen this done about Canyon City, Colo.

In regard to growing rhubarb, I have never heard of such experience as is mentioned. I have grown plenty of it in Kansas with good success, where we sometimes had very severe dry and cold spells. These were hard on it and sometimes the roots were killed. Good tillage and manuring and reasonable irrigation ought to keep the roots in good condition. If this will not then it will be necessary to get a new stock of rhubarb roots about every two years from elsewhere.

Reply: The cut worm nuisance is a terrible scourge in some sections. They

climb young fruit trees and eat the buds from them so badly as to cause them to die, as I have repeatedly seen in Michigan within the last few years, when I was spending my summers there. The best remedy, so far as I know, is to poison wheat bran or finely cut clover and put it on the ground under little boards with thin cleats on the underside of them. The cleats should raise the boards about half an inch or less from the ground. The worms will crawl into such hiding places, and finding the poisoned food there, will eat it and die. Dissolved strychnine or arsenic in water sprinkled on the bran or clover to moisten it will poison it effectively. The greatest care should be used that chickens do not get to the bran, for it will kill them. Clover they will rarely eat and it is therefore safer.

#### Arch Duke Plums.

Mr. Charles Green:—Please tell about the Arch Duke Plum in an early issue of the Fruit Grower.

In an effort to produce a strawberry perfectly adapted to my local conditions I have propagated a number of seedlings. Having no previous experience in this line, I am not able to proceed with them intelligently. Should they be transplanted more than once? and will they develop strength enough this year that I may give them a fruit test next year?

NOTE.—(Why should his local seedlings be better adapted to his locality than to other localities?—Editor.)

After ten years with strawberries, I believe it will pay anyone to develop a local seedling if possible.—L. M. Harmon, Ohio.

Reply: The Arch Duke is a plum that was originated by Thomas Rivers of England and was put before the public by him in 1883. It was imported to this country by S. D. Willard of New York in 1892 and has since steadily gained in the estimation of those who have tested it. The tree is healthy, vigorous and productive and the fruit is very desirable, especially for market. It is of medium size; roundish obovate in shape; dark blue when fully ripe; the flesh is deep yellow, often with slight reddish markings, firm and free from the stone; flavor sweet and rich if fully ripe.

Strawberry seedlings should be transplanted as soon as they are large enough to where they may grow and bear fruit without danger of their runners and young plants becoming entangled with those of other varieties. The first year of fruiting is not likely to show what they will do as they would at full maturity. But the second year of fruiting they should begin to prove their true character. If plenty of room is given for the spread of the plants by runners there is no seed for a second transplanting, but this is not material and either plan may be followed provided the plants are carefully transplanted, put in good ground and well cared for in every way. A local seedling is no more likely to prove adapted to the soil and climate than one that was originated elsewhere if we take the experience of the thousands of varieties of the strawberries that have been raised and tested. Some do better elsewhere than where they were originated.—H. E. Van Deman.



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"Lucky Low Down" Dump Cart.  
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with a horse. Saves its cost every  
year.

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**Will Open Any Tin or Glass Cans**

THE "SURE-OPENER" will cut an opening from  
two to seven inches in diameter in fruit, vege-  
table, meat and fish cans; paint, oil, syrup and  
molasses cans; it will also seal and unseal any size  
"Mason" or other glass jars. IT WILL RE-  
MOVE THE TIGHTEST STICKING  
SCREW TOP FROM TIN, GLASS OR  
CHINA RECEPTACLES. No more trouble to  
get tops off gasoline or kerosene cans. No more  
broken glass or china jars. Saves time and temper.  
Always ready. The cutter is always sharp. The  
grip for sealing or unsealing glass or china jars never  
slips. Adjustable to any size. Is  
built like a jack—  
a scientific can  
opener and sealer.

**The Lever makes a  
stronger grip than  
any man's hand.**

Because of its jack-like construction it is so strong  
that it will cut a perfectly smooth opening in the  
toughest tin, and will remove the tightest sticking  
screw top. Actual length is eight inches and made of steel to give toughness and strength. Nothing to  
get out of order. So simple and positive in its action that a child can easily use it.

**OUR OFFER**—Send 50 cents for a year's subscription to Green's Fruit Grower  
and the "SURE-OPENER" will come back to you by return mail.

**GREEN'S FRUIT GROWER**

**ROCHESTER, NEW YORK**



While the dry mash system of feeding  
is being used to a large extent today, yet  
there are many who consider the wet  
mash method better. Instead of using  
water with which to moisten the mash, use  
skim milk or buttermilk. Many times this  
can be secured for a low figure and the use  
of it will be very beneficial. Milk in any  
form contains much protein, which is a  
necessary element for growth or egg pro-  
duction.

A good strong person could do all work  
necessary in keeping five hundred laying  
hens and give them the best care.

In order to get the returns the hens  
must be well bred and not kept over the  
second year. When forced the first  
year there will be a decrease in her pro-  
ductiveness of about fifty eggs each year.

There should be pullets to replace the  
hens and which should bring enough money  
when sold to pay the cost of raising the  
pullets, and the cockerels when sold should  
pay well for the labor in raising the chick-  
ens, thus making an additional profit  
on the market poultry.

Be sure to put a goodly quantity of  
kerosene oil on the fowls that die from  
disease, and burn them. It is the better  
plan to thus get rid of them. If you bury  
them, some dog may undo the job for you,  
or if the grave is shallow the hens will  
scratch the diseased carcass back to the  
open air. A fowl that has died and the  
burning or burial neglected, will breed  
worms that the living fowls seemingly  
delight to eat, on the same principle, no  
doubt, that some owners of poultry have  
a preference for maggots cheese.

Of course this diet will prove detrimental  
to the health of the living birds. We are  
not sure but that the cause of the preva-  
lence of limber neck, in the flock of a  
neighbor some time ago, was the outcome  
of this fowl, and foul diet. That awful  
disease will result from such like food.  
This is one of those diseases that does not  
come by chance. If you ever have oc-  
casion to combat it, look well after some  
decayed meat of one kind or another, on  
your premises.

### Stopping the Leaks.

For the ordinary poultryman who has  
to buy all his feed at the prevailing high  
prices there is not much prospect of  
money-making unless the strictest atten-  
tion is paid to the matter of keeping all  
expenses at the minimum, says the Rev.  
W. W. Cox, in Poultry Review.

But it is possible to reduce the cost of  
feeding and get good results. Dry bran  
is a very economical food and a very  
valuable one, and it should be a stable  
article of diet for all fowls. A further  
use of bran can also be made in connec-

tion with a noon-day mash. Once or  
twice a week at about 9 o'clock take a  
quart of oats for about 25 hens, and pour  
boiling water over them, and cover them  
till feeding time; then mix with the  
oats and water all the bran necessary to  
make a crumbly mixture which will about  
double the quantity. A little salt will  
improve this ration. Give the hens just  
what they will eat quickly, and if any is  
left, remove it from the troughs. It is  
hardly necessary to say that such food  
should never be thrown into the dirt, but  
always fed in troughs.

By making use of a clover cutter, al-  
most all the vegetable leaves from the  
garden, and many weeds also, can be  
utilized for food. Table scraps, ought  
always to be saved for the fowls; and by  
saving the parings from vegetables, outer  
rinds of squashes and pumpkins, to-  
gether with small potatoes, turnips, beets  
and cabbages, and once a week, or oftener,  
boiling all these together, and when  
cooked mixing bran with them, a very  
palatable and nutritious food will be the  
result, and the cost very small.

There are many ways of saving here  
and there a little on the cost of feed and  
this will make the difference between  
failure and success.

Another way to save on expenses is to  
weed out the culls and drones, for they  
will never pay their way, but will always  
be a drain upon the purse. Do not let  
any wish for numbers induce you to keep  
poor or non-paying stock.

Remember, your fowls must always  
have grit where they can get it. And  
don't expect to make a success of the poul-  
try business unless you yourself have  
plenty of it.

### Put It Down.

The habit of jotting down every day  
incidents is a profitable one. Whether  
the records are of farm transactions in a  
business way, of the poultry yard, of  
when and where seeds were sown; whether  
they record the daily egg yield, and ration,  
or the expense account; whether they  
chronicle the doings and sayings of the  
children, or the yield, the harvesting and  
the marketing of the crops, a scrap book  
in which the day's incidents is put down  
will be the book referred to most frequen-  
tly next year, says Wallace's Farmer.

Going about his business on the farm  
every farmer thinks of how he can im-  
prove next year on this year's manage-  
ment. Unless he puts it down, he will  
not be able to remember next year what it  
was he decided to do. One man who has  
a page in his book which he calls his remind-  
er page, says he keeps an entry for each  
month under which he cautions himself  
to remember this or that which it is well  
to do the following season. A lady writing  
of her garden says: "I've often said when  
walking in my garden, 'Next year I must  
have more of this, or next year I'll plant  
this where it will get more sun,' and I think  
I won't forget. But when fall comes and  
the perennials must be made ready for  
the next year, I can't for the life of me  
remember just what I did mean to do.  
Now I am taking notes, and when fall  
comes I shall not have as difficult a time  
as I did last fall."

Put down the remedies which you have  
tried and found good; put down the varie-  
ties of vegetables which pleased you, and  
the time required to mature; put down the  
number of the hen which made the best  
mother; put down the title and page of  
book of any subject noted in your reading  
which you may wish to take up again.  
Put down all the incidents and accidents  
of the farm; put down the date of notes  
given or received, or purchases and sales.  
Such a book takes but little time to keep  
up, and is consulted often enough when  
kept to convince anyone of its usefulness.

### Getting A Fresh Egg Trade.

We are asked how to go about getting  
a private trade for fresh eggs. Some  
breeders have a post card printed with  
their advertisement, which they mail to  
prospective customers, requesting a  
trial order. Others place the eggs on  
sale in a store, paying the merchant a  
commission for handling the eggs. A  
private egg trade is usually built up slowly,

one pleased customer securing another.  
One of the most vitally important points  
in handling private trade of any kind is to  
always be able to furnish the goods. No  
matter if you have to buy eggs at double  
what you are getting, if you engage to  
furnish a certain number each week,  
furnish them. In the spring when eggs  
are plentiful and cheap, a private trade at  
an advance over the market price looks  
good; unless you can handle this trade the  
year around at a fixed price, don't take  
it up for the year. There is only one  
class of people who are more maddening  
than those who agree in March to furnish  
eggs the year around at, say thirty cents  
a dozen, and tell you in October that they  
cannot continue, and that is the class of  
buyers who agree in October to take eggs  
the year around at thirty cents, and tell  
you in March they won't continue.

### Poultry Notes.

A subscriber writes:  
"Last year I tried killing lice with  
the following lice-destroyer, which I  
found most effective: Mix one part of  
sweet or cottonseed oil and one part  
of kerosene. Apply with nasal douche  
or pen dropper lightly to the head and  
neck, under the feathers and to the fluff.  
It will follow down to the skin and kill  
every louse. Be very careful not to get  
too much on; just a drop on the top of  
the chick's head will kill head lice."

Remedy for Canker: "Take Balm  
of Gilead buds in the spring before blo-  
ssoming, fill a bottle two-thirds full, then  
fill with alcohol. Let stand a few days  
before using; swab the cankers well with  
this, and they will heal. Shake the bottle  
before using."

At the Kellerstrasse farm we noticed  
a swinging coop with slatted bottom,  
under a tree, and were told that broody  
hens were placed in this coop the first  
night they were found on the nest. Since  
the hens can not sleep comfortably in a  
coop with an open bottom, they are  
quickly broken up.

For treating brook coops, take three  
parts kerosene, one part carbolic acid,  
stir well, and apply with a brush. Fill  
all the crevices, cracks and knot-holes.  
Thoroughly sun and air brood coops  
before putting young chickens in them.

Keep no more stock than can be given  
proper care. Make up your mind what  
you had better do, and do it. A prospec-  
tive poultry breeder started out to get  
duck eggs for hatching. On the way he  
met a friend who advised him to take geese  
instead. Not having sufficient pasture  
for geese, and knowing nothing of their  
requirements—he lost all he hatched.  
Doubtless he would have lost the ducks.  
A breeder who is influenced by all his  
friends, and has no views of his own, is  
never a success. Outline a plan and stick  
to it until you have good reason to change.  
—Wallace's Farmer.

### EGYPTIAN INCUBATORS.

**Artificial Egg Hatching Practiced  
Since Pre-Historic Times.**

The hatching of eggs by means of  
artificial heat has been practiced in China  
and in Egypt from pre-historic times.  
In the latter country there still exist  
ancient egg-hatcheries or "mamals" that  
have been in continuous use in the same  
family for many generations. These  
incubators consist of large brick ovens  
that will hold about thirty to sixty thou-  
sand eggs at a time. The fire is built  
inside the oven and is watched carefully  
for ten days, after which no additional  
heat is necessary. The method of build-  
ing the fires and maintaining them so as  
to preserve the right temperature are  
trade secrets that are jealously guarded  
and usually kept in the family.

### Feeding The Young Chicks.

Thousands of baby chicks die annually  
as the result of overfeeding. The proud  
possessor of a flock of young chicks is so  
anxious for their welfare that food is kept  
before them all the time. The result is  
that the chicks' digestive system is unable  
to take care of all the food eaten, and  
diarrhoea or indigestion soon puts them  
out of existence.

Baby chicks should not be fed until  
at least thirty-six hours old. Perhaps  
it would be better to withhold food for  
forty-eight hours. For the first week  
stale bread, moistened with skim milk, is  
an excellent food for chicks. They should  
be fed at intervals of two hours, and no  
more should be fed at a time than they  
will eat up clean. If any of the food re-  
mains after the chicks are satisfied it  
should be removed. Keeping food before  
baby chicks all the time encourages over-  
eating, which invariably results in an  
upset digestion.—Tribune Farmer.

A Dollar Bill will do it—Green's Fruit  
Grower mailed to you postpaid Four  
Years for only One Dollar. Do it Now.



### Canned Foods: Use of Water, Brine, Sirup, Sauce, and Similar Substances in the Preparation Thereof.

The can in canned food products serves not only as a container but also as an index of the quantity of food therein. It should be as full of food as is practicable for packing and processing without injuring the quality or appearance of the contents. Some food products may be canned without the addition of any other substances whatsoever—for example, tomatoes. The addition of water in such instances is deemed adulteration. Other foods may require the addition of water, brine, sugar, or sirup, either to combine with the food for its proper preparation or for the purpose of sterilization—for instance, peas. In this case the can should be packed as full as practicable with the peas and should contain only sufficient liquor to fill the interstices and cover the product.

Canned foods, therefore, will be deemed to be adulterated if they are found to contain water, brine, sirup, sauce, or similar substances in excess of the amount necessary for their proper preparation and sterilization.

The addition of tomato juice in excess of the amount present in the tomatoes used is adulteration—that is, if in the canning of a lot of tomatoes more juice be added than is present in that lot, the same will be considered an adulteration.—R. E. Doolittle, A. S. Mitchell, Board of Food and Drug Inspection.

### Report on Missouri Apple Crop.

The set of apples has been only fair to good. Some varieties, as Ben Davis, Gano, and Winesap set well and will give best crop. Jonathan and York set poorly in all sections, while most sections report poor set for summer varieties. As an average for the state, estimated by our correspondents, the apple crop now stands at 72 per cent. This seems to be fairly uniform throughout the state. The lowest average is for Northeast Missouri, 64 per cent. while the highest, Northwest Missouri has 77 per cent.

At this time last year the outlook for an apple crop was placed at 35 to 40 per cent. The average number of growers reported spraying is 16 per cent. Northwest Missouri leads with highest number, 20 per cent., while Central Missouri reports the least, 11 per cent.—W. W. Chenoweth, Secretary State Board.

**Bagging Grapes.**—I have just read your article on bagging grapes, we have to bag them here, and I have tried different methods of fastening the bags to the clusters, and find the easiest and quickest way is to take a piece of galvanized mosquito netting about 4 inches wide and pull the strands of wire apart, taking these wires and giving them a twist around the mouth of the bag effectually closes the bag, and is much better than using pins or strings.—Geo. E. Tilly.

### Bud Moth Injure Pear Crop Near Rochester, N. Y.

The owners of pear orchards near Shortsville, N. Y. make the statement that they will not be able to harvest any crop this year, owing to the fact that the troublesome insect known as the bud moth has been working in the trees and, in most cases, has destroyed the leaves as well as the buds.

The larvae of the bud moth winters in its silken cocoon covered with bits of dirt and bark, attached to the limbs of trees, and in the early spring, as the buds of the pear trees are opening, the little dark brown caterpillars emerge from these winter quarters, to begin their destructive work. They attack the tender leaves and the developing buds before they are open, and when abundant, do a great amount of damage. In some cases the twigs of the trees are penetrated, the larvae boring into the pith to a distance of from two to three inches. It is said that by properly spraying in the spring this condition of things could have been overcome.

### Fishermen and Shepherds.

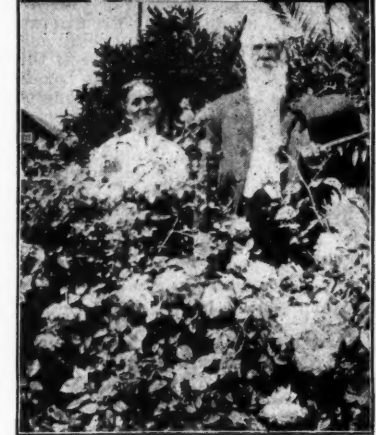
The origin of English fisher idylls, or "piscatory eclogues," is to be found in the poems of ancient Greece, just as is that of shepherd song, says Henry Marion Hall in *Idylls of Fishermen*. In a land of islets, sounds, and promontories many a youth drove his flock afield on hillside where he could look down on the blue shield of the sea, rimmed with white surf, seeking and thundering on rock-ribbed coasts, or tumbling in lines of breakers along curving reaches of yellow sand. Amid the waste of dunes a spot here and there marked the hut of a fisher, while not far away the solitary owners might be seen, tugging at the oars or hauling their nets. When these men in the fishing skills paused for a moment in their labor and glanced toward the uplands they saw the white of sheep, dots on green pastures, or heard perhaps the faint and distant music of the pastoral pipes. By very necessity the herdsman and the fisher were near neighbors. So it is only natural

that they should appear in verse as companion figures. Thus there existed in the beginning of country song an obvious relationship between poetry dealing with rustics and that concerned with fishermen.

### Economy In Cooking.

While so much is being said and written about the high cost of foodstuffs, it is well to remember that the housekeeper who has the most knowledge of the materials with which she works and the most skill in applying her knowledge, is the one who can make the money at her disposal go the farthest.

The cheaper cuts of meat are as nutritious, and when well cooked, are as palatable, as the more expensive cuts. If she wishes to use something in place of meat, she has fish—fresh and cured—milk, eggs, beans, peas, and similar legumes, nuts if they are relished, and last, but very important from the standpoint of its food value, palatability, and the great number of ways in which it can be used—cheese.



The upper picture shows two children of our subscriber, name lost. The lower picture is Hugh Thornton and his wife surrounded by their beautiful roses over which they are enthusiastic.

The ways in which these substitutes for meat can be served are numerous and varied. Individual taste and food habits are to be considered, but, in general, it is true that the relish with which other dishes are accepted in place of meat depends upon the ingenuity and skill of the cook. It seems a foundation principal that as meat is a savory dish, any acceptable substitute for it must be savory or must be made so by suitable seasoning and proper cooking.

Those who wish to make substitutions of these foods for meat often desire to know how much of each is necessary in order to replace a given amount of meat. If we consider only the proteins of the meat, the following general statement may be made; 2½ quarts milk, 1½ pounds fresh lean fish, three-fourths pound dried fish, two-thirds pound ordinary cheese, somewhat less than a pound of mixed nut meats, 9 eggs, one-half pound shelled peanut, or two-thirds pint dry beans, peas, cowpeas, or lentils is equal to a pound of beef of average composition.

### CHEESE AS AN ECONOMICAL FOOD.

It will be seen that two-thirds of a pound of cheese contains as large an amount of what laymen call "the muscle forming" materials, as one pound of beef of average composition. According to abundant analyses, cheese compares even more favorably with meat if its fuel value instead of its percentage of protein is taken into consideration, for one-half of a pound of ordinary cheese yields as much energy as a pound of beef of average composition.

If the housekeeper wishes to know how to make several sorts of Macaroni and Cheese, Boston Roast, Baked Eggs with Cheese, and a large number of other cheese dishes which are palatable as well as nutritious, she can find out by sending to the Secretary of Agriculture, to a Representative in Congress, or to a Senator, for a copy of Farmers' Bulletin 487,

"Cheese and Its Economical Use in the Diet," which has been called "Uncle Sam's Welsh Rabbit Book."

Taken as a whole, the bulletin makes out a good case for cheese. It should be helpful to those who for any reason wish to use cheese in greater quantities in their diet. Since it shows, on the basis of many experiments, that cheese is not to be regarded as a cause of physiological disturbance with the average healthy person, it should remove any prejudice which may have been entertained regarding the desirability of eating cheese in quantity.

Charles A. Green:—I am a subscriber to Green's Fruit Grower and would like to know if sink drain-water such as comes from a kitchen is good or bad to put on fruit trees or shrubbery.—Timothy A. Trant, Conn.

C. A. Green's Reply: There is much fertility in the soapy water that comes from the kitchen drain. I assume that you refer to the liquid waste. It should be applied freely to the soil about the roots and a basin should be prepared over the roots to hold the water until it can soak down through the soil to feed the roots.

### Cultivation Holds Moisture.

Perhaps the greatest factor affecting the duty of water is that of cultivation. If the water absorbed by the soil can only be retained and made available for the growth of the plant, the problem of the duty of water has been practically solved. Crops that will permit a thorough cultivation after a thorough application of water will show a decided increase in the yield. It has been determined that the evaporation from an uncultivated field in a single month is four times that of a similar field having a three-inch dry mulch.—Ralph E. Parschall, Colorado Agricultural College.

How to make a Fruit Farm of an ordinary Grain Farm is told by C. A. Green in his illustrated booklet of sixty-four pages, telling how he succeeded on a fertile but run down farm near Rochester, N. Y. The price of this booklet is twenty-five cents postpaid.

### Tent Caterpillars.

Kindly answer in your next issue of Green's Fruit Grower what is an effective preventative of the tent caterpillar. Would girdling the tree with a sticky substance keep them off?

As a comparatively new reader of your paper I shall be interested in your reply.—John Gibbons, Mass.

C. A. Green's Reply: At Green's Fruit Farm we hunt for eggs of the tent caterpillar during the winter months. They can be seen as a clump or band of whitish eggs glued together encircling small branches. As soon as the eggs that have escaped detection during the winter months hatch out in the spring, we go through with a torch attached to a pole and burn the nests. This should be done in the early morning or in the afternoon when the caterpillars are in the tent. Do not wait until the caterpillars get full grown. Girdling with a sticky substance would not be successful for the worms are hatched on the tree.

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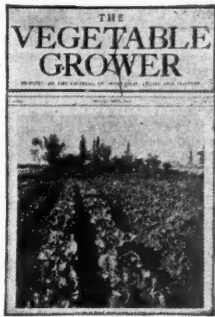
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**GREEN'S FRUIT GROWER** for thirty years has advocated fruit growing as the most prolific and profitable use of garden and farm land. It is the oldest fruit journal in America and is recognized as the leading fruit paper in the United States. It covers the whole hardy fruit field. It tells in the plainest terms just what to do, how to do it and when.

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**THE VEGETABLE GROWER** is published monthly. It is devoted to the growing of vegetables, small fruits and flowers. It is edited in a clean understandable way, by authorities in their chosen fields. It is practical in everything it does and should be of much help and interest to the market gardener and the farmer who grows vegetables or has a garden. It will assist you in the hundred and one things that perplex you each month. Each issue will be worth what you pay for it for the entire year. It will show you how to make money from your vegetable garden or from your flowers. It teaches how to rotate crops, it teaches companion cropping which means growing three or four different kind of vegetable on the same piece of land at the same time. No space is wasted. Everything is practical.

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Green's Fruit Grower, Rochester, N. Y.

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Dickey's Old Reliable Eye Water cures sore eyes, strengthens weak eyes. Don't hurt. Mail 25c. Dickey Drug Company. Bristol, Tenn.

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FARMS WANTED. We have direct buyers. Don't pay commissions. Write describing property, naming lowest price. We help buyers locate desirable property free. American Investment Association, 32 Palace Bldg., Minneapolis, Minn.

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80 acres, choice fruit location, Benzie Co., Mich. Within three miles of Lake Michigan. Hardwood land. Two elegant springs. A choice property for fruit of all kinds and poultry. \$35,000 per acre. \$1000 cash. Murray Acklin, Beulah, Mich.

MONEY-MAKING FARMS THROUGHOUT 17 STATES; one to 1000 acres, \$10 to \$50 an acre; live stock, tools and crops often included to settle estates quickly. Mammoth Illustrated Catalogue No. 35, free. E. A. Strout Farm Agency, Station 1233, 46 West 34th St., New York.

## REAL ESTATE WANTED

SELL YOUR PROPERTY quickly for cash, no matter where located, particulars free. Real Estate Salesman Co., Dept. 22, Lincoln, Neb.

## MISCELLANEOUS

Vegetable Plant Shippers. Price list free. Rochelle & Sons, Chester, New Jersey.

Grow \$3,000 as a side line. Raise Golden Seal. Sure crop. No hazard. Rising market. Advice for stamp. C. S. Dodge, Albany, Wisc.

DAY OLD CHICKS FOR SALE. 17 varieties. Prompt shipment. Strong, natural hatched, thousands per week. Catalogue free. Old Honesty Hatchery, Dept. G, New Washington, O.

BUY NO BARREL CAPS until you get a sample of the APCO SHIPSAFE cap. The deep, close corrugations make them much better for either top or bottom. Write for sample stating about how many you will use. American Paper Products Company, 300 Bremen Ave., St. Louis, Mo.

## Boy In Cherry Tree.

C. A. Green:—Having received Green's Fruit Grower for several years and read the ups and downs of different people, especially those that have seen hard times, and having read "How I made the Old Farm Pay," it reminds me of my experience when I was a boy of twelve, twelve years ago. Just about the end of the Spanish War my father lost his position which he had held for about twenty years, so that when the Fourth of July drew near it behove my brother and myself to get busy and get some money for the Fourth. The thing that mother told us to do, was, that for every two pounds of cherries we picked off the tree in the back yard (ours is 50x150) we could have one pound of cherries to sell for our celebration. That year we picked about 250 lbs. of cherries (for this tree was planted over twenty years ago) as much as I can remember we made over twenty dollars (with mother our treasurer) which was more than enough, for us three, their being a younger sister who helped in the picking, we climbed the tree and when our pails were filled we let them down on a string to sister who emptied them in a big basket, after we had picked about fifty pounds (which took us over a day sometimes to do) we put the basket in a hand wagon and sold them around the town.

The following year we did not have to peddle them as we had orders for more than we could supply and we had our celebration every year and mother had a few dollars besides.

Two winters ago the tree was partly destroyed by a storm, three big branches broke at the place where they branch off from the main trunk of the tree. This was due to the fact no doubt that no ladders were ever used, having always climbed up the tree, but thanks to Green's Fruit Grower which I had just started to receive, the stump of the old branches were cut off and painted over and when the sprouts started to come in the spring, I trained a few of the best ones and cut off all the others so that the tree is on a fair way to recovery making practically a new tree.

The tree is an Early Richmond.—J. R. Thompson.

## The Purple Martin.

C. A. Green:—I note your fine article in June issue of the Fruit Grower on, "Our Friend the Birds" but you seem to have neglected to mention the dearest bird that ever adorned this country, the Purple Martin, the largest of the swallow family. Were I a man of wealth, I would drop all other work and devote the rest of my life to the replacement of this beautiful and useful scavenger of the air which has been almost driven away by the noisy, filthy, chinch propagating sparrow. When I was a boy (born Jan. 16, 1847) it was said that if a man built a house a martin would come and live with him. Ride or drive in any direction you might you would not find a home without its martin box. To day one might drive hundreds of miles without seeing one. I can recall the bitter conflicts the poor home returning martins had when they found the wretched, ever-present sparrow

in possession of their boxes. If you will go to the trouble of examining a city sparrows nest you will find in it the common bed bug, gotten perhaps from old rags picked up from sweepings. I was once sitting in Franklin Park, this city with Congressman Harris when a bed bug fell from the air upon one of his cuffs. Now the crow black bird ("Purple grackla") built nests every year in the park trees, but the sparrow throw out their eggs and capping them over occupy them themselves. The bench we sat upon was directly under one of these nests. On another occasion I heard something drop upon my shirt front and as there was no nest or tree limb above it must have been dropped by one of the many passing sparrows. It was early noticed that when sparrows occupied or shared the boxes with the martins, the martins brought forth no young. Whether they were destroyed by sparrow lice or bed bugs is not known.

Once had a blue bird box nailed against the side of the chicken house when I moved here the owner told me he had never been able to clear the house of chins. I soon noticed that the incubating hens had yellow gills and combs and would not keep their nests. Several hens died upon their nest. I discovered that the eggs were spotted all over (the bag's excrements). To make a long story short the bed bugs had crawled from the sparrow box through the cracks of the boarding, infecting all the nests on that side of the house. There is no use for anyone building a martin box or house unless they keep it free of sparrows till the martins arrive and then they will drive them off. You should build or have built a box at your house. There are a few martins left in the country and if the box is up by April the chances are that it will be found by some homeless pair of martins. Twelve years ago I saw a pair trying to find a nesting place under the eaves of the Methodist building, two hundred yards from my house. Their joyous notes were childhood's music to me. Instead of going to town I returned and hastily fixed up an old shoe box nailed it against a board and nailed the board against the gable of the barn. The next morning I was made happy by the laughing, warbling song of the pair. This was my start. Four years ago I built my 3 boxes which was no easy job for it had 36 compartments or brood chambers, 8 by 7 inches and 6 inches pitch. My close friend and neighbor offered me one hundred dollars for it. John R. McLean told me he would give me as much if I would build him one just like it. Although a poor man I refused them loving my birds too much and having no time to spend upon another. My maternal grandfather was a naval officer and some of his flagship sailors made him a large house on the top of which were four ships with tin sails which revolved when there was wind enough. In the ante bellum days very costly boxes were put up. The nests of the barn swallow are also raided and occupied by the sparrows. I am very uneasy about my martins because I am breaking up here and intend to move to California (grow up with the country) about July first. It makes me sad to think that probably no one will drive off the sparrows in the spring, nor build a new box when this one decays. So that they may have no place to rest their weary wings unless they fly to far away Rochester where you might give them a house. About 100 young fledglings or more are in the box at present, as every one of the 36 rooms have occupants. If I was the editor of your splendid paper, every March issue would hold a notice begging my patrons to build a swallow box. The government and the states would spend thousands, if some silly, shallow brained scientist would devise some method to destroy the mosquito and fly, provided it was scientifically done and led to the employment of an army of faddists. But neither our agriculture department nor the State Experiment Stations will tell us how to preserve the weapons nature has in her greater wisdom given us. Nor would any common sense, safe and sane means be adopted because they are imbued with the belief that unless they keep carrying out some new fad or fake remedies people who are taxed to support them will think they are not earning their salaries. Here is a family of birds that live on gnats, flies, mosquitoes (cloudy days) and other pests and nothing is done to preserve it. In many sections of our country it is almost impossible to start a patch of melons or cucumbers on account of the melon beetles. In the nest of the martin can be found hundreds of the wings of this insect.

As you say there are many conflicting accounts of the Titanic wreck. I lost some close friends when she went down. Col. Butt came to my place many times with President Taft and I have known him for years. Clarence Moore lived not far from here and I met him out frequently during the season. It was stated in the papers that Miss White, who taught music to Mrs. Taft's children, was put into one of the life boats by Major Butt and

tucked in while he was sending his love and good by's to his Washington friends, etc. As a matter of fact Miss White is telling all her friends here that she did not see Archie Butt at all after the steamer struck the iceberg.—Arthur T. Goldborough.

Strawberries do not need lime; in fact, they seem to thrive best on acid soils. An experienced grower says he finds that strawberries do best for him where he cannot start clover without a heavy application of lime.

## Concerning Bees.

If people knew what a great source of profit is found in the keeping of bees and how interesting the work, there wouldn't be an unused square foot of ground on any farm in the United States.

Bees are the only producers known to husbandry that yield a profit without cost of feed. They find their own pasturage. They multiply so rapidly that they more than pay for the small initial expense of housing them, and the first cost of equipment is almost trifling.

Bee culture may be made profitable by the children of the farm, or by the women members of the family. It may be carried on successfully in conjunction with the keeping of poultry or the growing of fruit. In the latter case, apiculture is found to be a great help toward more fruit and better fruit.—California Fruit Grower.

Labor, if it were not necessary to the existence, would be indispensable to the happiness of man.—Johnson.

I think she will make a fine wife. I have been calling on her for several months now, and nearly always find her darning one of her father's socks.

"That caught me, too, until I found out that it was the same sock."—Kansas City Journal.

"You say you have a musical education," asked Senator Sorghum. "Yes," replied the young man who is learning politics. "But I don't expect it to be of much assistance in this business." "You can't tell. There may be so much objection to a man's receiving campaign contributions that every candidate will have to be his own brass band."—Washington "Star."

## Things Worth Knowing.

An onion cut up and put in the roasting pan with mutton or lamb, adds to the flavor of the meat.

Apple, pear and peach stains yield to a bath in kerosene.

Open windows of sleeping and living rooms every pleasant day for a few moments.

Hang out pillows, blankets, quilts, etc., on the line occasionally through the winter and spring.

When the invalid wishes fresh air raise an umbrella, put it over him or her with a shawl or blanket thrown over all, raise the windows (lower them if possible) for a few moments.

Cupped Eggs.—Put a spoonful of nice gravy into each cup and set cups in a pan of boiling water. When gravy is hot drop an egg into each cup, being careful not to break the yolk. Then take the pan off the stove, cover it until the eggs are nicely cooked. Salt and pepper; very nice.

Odds and ends of meat, beef, pork, bacon, chicken, etc., chopped very fine, is excellent to put into omelets. Four eggs beaten very light, four tablespoonfuls of milk, a little salt and pepper, half a cup of chopped meat put in last; butter frying pan. When piping hot pour in half of the omelet. When it sets roll over carefully lift out on platter and put in the rest. Cook same way.

## The Mighty Amazon.

The main stream of the Amazon is navigable to ocean steamers as far as Iquitos, 2,300 miles from Para and 486 miles farther for boats drawing 14 feet of water. Beyond that point a steam launch might be used almost to the headwaters. But how much easier would be the task of descending the river from the eastern side of the Andes. Commander Todd, U. S. M., who ascended in the United States steamer Wilmington to Iquitos in 1899, reports the average depth of the river below that point as exceeding 100 feet.

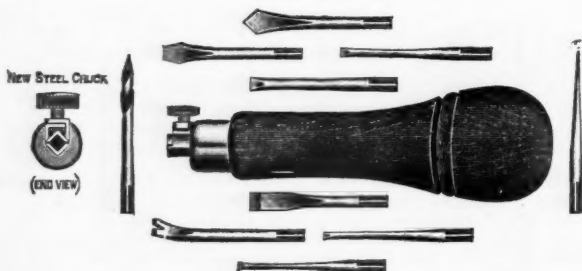
One of the most famous travelers who ever visited the Amazon said: "It is not so much a river as a gigantic reservoir, extending from the sea to the base of the Andes and in the wet season varying from 5 to 400 miles."

A curious feature of this great stream is that nearly all of its large tributaries run flood at different parts of the year.—Brooklyn Eagle.

'Progressiveness means not being caught standing still when everything else is moving."

## THE NEW HANDY SET OF TOOLS

Every house, every barn, every shop, every man, every boy, every house wife, indeed almost every person needs a set of these handy tools. The new firm grip is a valuable improvement on the old style.



The illustration shows the tools much smaller than they really are. Think of the things you can do with a set of these tools. The whole ten tools go inside the handle and are always ready.

How to get the complete set. Send us four new yearly subscribers to Green's Fruit Grower at thirty-five cents each and we will send you the whole set in a box complete ready to use, all charges prepaid to your door.

## GREEN'S FRUIT GROWER COMPANY

ROCHESTER, N. Y.



### Those Old Currant Bushes.

Written for Greens Fruit Grower  
By Frank I. Hanson.

Nothing associated with my boyhood days on the old farm afforded more pleasure than the rows of currant bushes in the garden. There were two of them, dating sometime before my earliest recollection. With what wonder and admiration I used to watch father dexterously handle the hoe when removing the grass and weeds that seemed determined to flourish. How skilfully he cut away certain branches with the sharpest of knives, and at times they would be sprayed with a mysterious mixture. Outside of this he did not bother with them, as currants are very hardy.

Surely they were one of the most valuable resources of our farm. In the early summer months when "pie timber" was scarce the green fruit made a delicious pie. Such pies could not, however, be favorably compared with those made from the ripe fruit. In my estimation they are never excelled and seldom equalled by any species of the pie family. I can almost taste them at the thought of a quarter section being removed and the profuse flowing of red rich juice in the plate-bottom. We youngsters always held our plates for a few spoonfuls—and we always got it.

While in the depths of this pie reverie I must attempt a tribute to those steamed currant puddings that mother used to make. Indeed I cannot make but a poor attempt, for the poet must yet be born who can command language adequate to describe the delicacy in its proper glory—its red-and-white interior, just flooded with sweet sauce and piping hot.

My enjoyment was not wholly dependent upon the magical powers of cooking, for they were delicious in their natural state. Indeed, those bushes, with their abundance of red shining fruit, were to us boys a veritable quick lunch counter. After a plunge in the cold river, after all the bears in the barn had been ruthlessly slaughtered and their pelts stretched upon imaginary doors, after our appetites for cookies had been satisfied, after everything else became monotonous, they became an irresistible temptation. Many rows of poled beans and sweet corn on either side formed an excellent retreat.

Bless my soul! how sour they were! Really! I have almost felt my hair rise and my back shiver! Their tartness and the high cost of sugar has caused many anxious frowns on mother's brow. She sometimes thought that the more she sweetened them the worse they grew!

We rarely ate as we picked, for that made the process of eating altogether too slow. Instead we would pick a good quantity into our old straw hats and devour them by the handful elsewhere. Under the old grape vine by the garden wall was a favorite spot. It reminded us of Indians, quite enough to make it attractive to most any country boys.

Surely eating from our hats was not strictly proper, but to us it seemed a natural and most convenient method of overcoming a difficulty. Hygiene and cleanliness were details too trifling for even a thought, as has been the case with all red-blooded boys throughout the ages.

When the leaves began to look old and rusty and the remaining fruit to wither and fall, the end had not come by any means. While the fruit was at its best many jars of preserves and glasses of jelly had been prepared for winter use. So were our temptations keen throughout the whole year.

Sometimes a jar, together with spoons and a loaf of bread, would be confiscated and enjoyed on the highest haymow. Of course we would confess all at bedtime and mother would forgive us with a kiss, hoping that her boys would always be as honest. That was mother all over.

The boy who has never had the privilege of helping himself from these reliable and prolific bushes has missed one of the keen joys of life. The man who does not have plenty of them in his garden is making a mistake.

### Thinning Fruit.

Thinning out overloaded trees is a measure too little esteemed. Trees are frequently allowed to so overbear as to prevent the production of marketable fruit. Besides this, the excessive draft upon the vital resources of the tree so over-cropped frequently so disables it that it is unable to mature a crop of fruit buds for several years after. Sometimes the tree's constitution is so weakened that it becomes sickly and finally succumbs. To the wide-awake fruit grower there is no more important question than how to thin and reduce the fruit on an over-burdened tree. There is the certainty of producing handsome fruit of marketable value on the one hand, and conserving the vital resources of his trees on the other, maintaining them in vigorous health, which is an absolute assurance of success where other things are equal. So far as the present season is concerned we judge there will be no call for thinning

the peach or pear crop; but if no untoward accident destroys the present prospect there will be a chance to exercise our nerve and skill in reducing the very large crop of apples now setting upon many varieties. Last year was an off year with many varieties, notably, the Ben Davis. The rest of an off year has enabled them to mature a superabundant crop of fruit buds, which now have set a crop that will bankrupt the trees to carry to maturity. One-half or more of this young fruit should be removed within the next thirty days. It is a fact generally admitted that the strain upon the vital forces of a bearing tree is mainly on account of maturing seed. The edible part of all fruits is made chiefly of water; we don't think we would exaggerate if we said 90 per cent. is water. Therefore, if we lessen by one-half the production of seed there is a decided increase in the size of fruit with very small draft upon the vital energies of the tree. In thinning there should be a care to leave the crop as evenly distributed as possible. An excess upon some branches may cause an unnecessary break down. The same crop more evenly scattered upon the tree would have escaped such a disaster.

The bugbear that stands in the way of most orchardists is the labor and expense of removing the surplus. Hand picking is a slow process and can only be entrusted to careful, painstaking labor. We have known of some instances where the fruit was thrashed off the trees. Such a practice is most reprehensible. G. H. Miller, speaking on this subject said, concerning the thinning of peaches:

"We should leave the peaches from four to six inches apart, as equally distributed as possible all over the tree. The cost of thinning should not be considered, as if they were left on the tree they would have to be picked when ripe, and it certainly will cost less to take them off when small, to say nothing of the vastly increased value of those that are left to fully develop."

Mr. Miller is right. If allowed to ripen, the smaller fruit must be picked. No sensible man would allow even ripe peaches or apples to be thrashed off. So in reality it will cost no more to pick off half the fruit green than if all were to ripen to be gathered later.

It takes a whole lot of grit to go into an orchard and pick off half or three-fourths of the fruit green. It looks as if nothing is left. If any one is afraid to tackle the whole crop, just try as an experiment a few trees, and watch the outcome. Most likely you will be agreeably surprised with the results.

### Plant Lice—A Warning.

The abundance of plant lice eggs on twigs sent to this office and numerous aphids upon young apple leaves are typical of conditions obtaining in 1909, a year when injury by these prolific pests was exceptionally severe. We then heard for the first time of "Aphis" apples. Apparently all that is required is a continuation of the cool backward weather to duplicate the outbreak of three years ago. The reason for this is that the plant lice multiply rapidly at rather low temperatures while their natural enemies such as lady beetles or lady bugs, flower flies and small parasites, are comparatively inactive under such conditions.

It is obviously advisable to watch developments closely and if the aphids become excessively abundant, spray before the leaves are badly curled and the pests therefore nearly inaccessible, using a whale oil soap solution (1 lb. to 6 or 7 gallons of water), a kerosene emulsion (the standard formula diluted with 9 parts of water), or a tobacco solution. There are several excellent tobacco preparations on the market. It is essential in control work of this character to hit the pests with the insecticide. The necessity for this spraying must be determined in large measure by local conditions and the probability of cool weather continuing long enough, so that it is unsafe to depend upon natural enemies. There is an excellent opportunity for the exercise of judgment by the practical fruit-grower.—E. P. Felt, N. Y., State Entomologist.

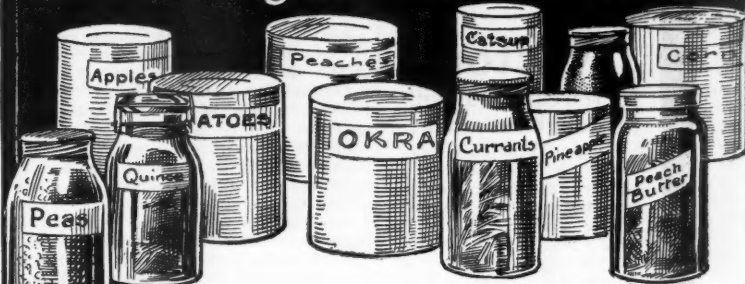
### How to Kill Quack Grass.

The Department of Agriculture has recently issued Farmers' Bulletin No. 464 on "The Eradication of Quack Grass." Quack grass is well known to most farmers all the way from the Atlantic to the Pacific in latitudes north of the Ohio and Potomac Rivers. It is one of the most serious weed pests known in America. The grass grows under a great many different names, among them couch grass, witch grass, and twitch grass.

Farmers' Bulletin 464 embodying this work can be had by applying to your senator, congressman, or directly to the Department of Agriculture at Washington.

There are some things that money cannot buy. Still, if we have the money we can generally manage to struggle along without them.

## Don't let your fruits and vegetables ROT!



## Stop the Waste—Can Them at Home

Get our Steam Pressure Boilers and can your fruit and vegetables. Supply your own table the year around, sell the rest at three to five times what they bring in the raw state and make a snug little sum every season. Sell as long as the markets are good. Can the balance and get big profits.

Canning at home, as an industry, is now recommended by the United States Department of Agriculture, and by every Experiment Station and State University in the Union. It is only a matter of a few years when home canning outfits will become as popular in the farming and fruit raising districts as the cream separator now is in the dairy districts.

### Millions of Dollars Worth of Fruits and Vegetables Annually Wasted

caused by poor markets and insufficient shipping facilities. Fruits of all kinds—corn, peas, string beans, pumpkins, tomatoes, fish, pork and beans, etc., can be canned as easily as cooking eggs or boiling potatoes, if you have the right apparatus, in either glass jars or tin cans.

## HOME CANNING OUTFIT \$15

Complete

These Home Canning Outfits are the regulation Steam Pressure Boilers with safety valve, steam gauge, etc., same as are used in every modern canning factory in the world, only made in smaller sizes to be used on the kitchen range or in any convenient shed or building. Nothing complicated, intricate or at all difficult. Hotel and Factory sizes are of same principle, only larger in size and capacity.

### "Secrets of the Canning Business"

This book lays bare the inside secrets of the canning industry. It exposes the simplicity of the art of canning and shows how every grower or farmer can accomplish the identical results in the same way. It explains fully the methods of canning—how to do it; and tells how you can greatly raise the value of your products.

### Start in the Canning Business

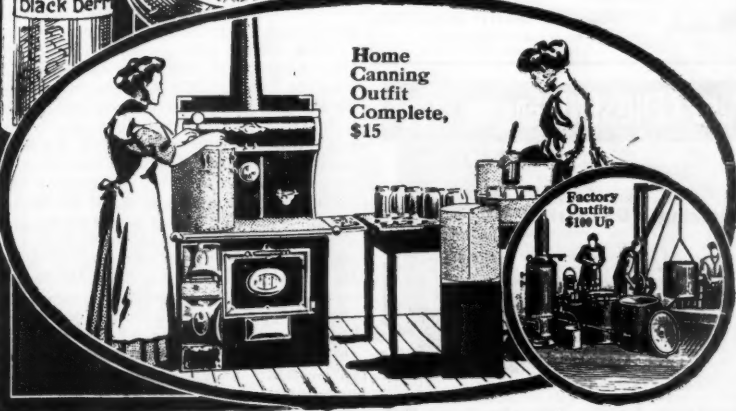
No special training or skill required. The Home Outfit enables you to can enough for your own table and sell to your relatives, friends and groceryman. Going into it on a larger scale with Factory Outfit, pays big. Fruit growers add \$500 to \$1,000 to their yearly incomes with very little work. Investigate the big possibilities.

**Agents Wanted** We are constantly on the lookout for active agents to sell our Canning Outfits in every locality. This is a great proposition for fruit tree agents. We offer special inducements and make a very liberal proposition. If interested, write for our Agents Offer. Write now.

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## Popular Fruit Growing

By SAMUEL B. GREEN, B. S. Hort., For.

Professor of Horticulture and Forestry in the University of Minnesota

This book covers the subject of Fruit Culture in a most thorough and practical manner. The great growth and wide specializing in fruit growing has led to the increase of troublesome pests. This subject is explained so carefully that a painstaking grower can quickly recognize the presence of these pests in their formation and check their injuries by applying the methods of extermination so minutely described in the chapters "Insects Injurious to Fruits."

Each subject is treated in a most exhaustive manner, every phase of fruit growing is considered from a practical standpoint and the very latest ideas and methods outlined and discussed.

An abundance of new thought has been crowded into these pages. Many special drawings and illustrations are used to more clearly explain the author's methods. Among the many topics discussed are: The factors of successful fruit growing, orchard protection, insects injurious to fruits, spraying and spraying apparatus, harvesting and marketing, principles of plant growth, propagation of fruit plants, pome fruits, stone fruits, grapes, small fruits, nuts, etc., etc. At the end of each chapter are suggestive questions on the matter presented.

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### Letters From the People.

"Prudent questioning is the half of knowledge.—Proverb.

Editor Green's Fruit Grower:—I have your favor of recent date, the first page of the May issue of the Grower with the notation that "this is sent in response to the request of W. B. Powell. The truth is what we are after."

My previous letter to you had no bearing upon this article, but to the one which appeared in the April issue of the Grower under the head of "Walks and Talks." I have had a number of copies of this issue sent to me since its publication, by your readers, who protest against the untruthfulness of the article. When I wrote you some days ago, I had no idea that the editor of as important a paper as the Fruit Grower would write such stuff, which has not a semblance of truth or reason in it.

I have read the story in the May issue, entitled "Orange Growing in Florida," and it is my opinion that the writer is so biased towards the state that he can see nothing good in it, although it is proven in this one instance that a man was making big money off of a small grove.

The mere fact that the writer visited De Land and Miami is no ground on which to form an opinion of the entire state. We have the northern boundary line, and the western part of Florida, the East Coast and the West Coast and the Everglades, which are distinctive in soil and in climatic and other conditions. You cannot form an opinion of an adjoining county from what you see in the county in which you live or which you visit. Here in Hillsborough we have more or less of a flat country, slightly rolling, with an elevation probably not exceeding 90 ft. Both Pasco and Hernando counties, adjoining us on the north, are hilly and the soil is different, considerable of it having as much clay in it as you will find in New York State. When you are at Brooksville or at St. Leo and look over the valley you believe that you are in the Catskill mountains, on account of the valley and lakes which lie below you and the vista of miles before you.

In the article before me you leave the impression that Judge Perkins' grove is an exception and that probably there are no other groves in the state as profitable. The whole story as I read it looks as if the language was couched so as not to offend the host, and at the same time give Florida a slap in the face. There are so many misleading statements that it would take pages to answer them.

In the first place, you do not find charcoal pots and wood piled in the groves for protection's sake except in a few instances. You seldom find a grove with the soil banked about the trees to protect them from frosts. And you do not find any soil in the state of Florida, excepting the sifting beach sands, where your feet sink into the sands like "newly fallen snow." I have driven 30,000 miles over the roads of Florida, going everywhere in an automobile, and if the soil was as you say it is, I would confine my driving of the car to paved streets. On the contrary, we have pine wood roads which we traverse for miles upon miles, where the soil is as firm as macadam. We make no attempt in this state to raise naval oranges, simply because Florida oranges are so far superior in juice contents, in sugar and in flavor. There are but few groves in this state that employ foremen, as the average grove is not over ten acres and the owner is able to take care of it himself. If Judge Perkins can hold court and superintend 70 acres of grove, your statement that many of the growers of Florida employ foremen at a large salary does not coincide with Mr. Perkins' mode of management. The fact that Judge Perkins netted from ten to eleven thousand dollars off of his grove, and which you cite as exceptional, is also misleading. There are hundreds of growers in the state who have done as well if not better than Judge Perkins.

Your writer also seems surprised that they throw out the light oranges in the packing house. Then in the next breath he advises northern people not to buy light fruit "for the light oranges are of a poor quality and not worth bothering about." I think this caution was not necessary, because the writer saw those light oranges being thrown out in the packing house. The writer also had to get in a jab upon the usual bugbear to the northern man—the snakes and alligators. He is told to look out for rattlesnakes and alligators the same as we used to tell the tender foot out west to look out for buffaloes and Indians. I have lived in this state six years, and have never seen a rattlesnake except those in captivity, nor have I ever seen an alligator in its native haunts, and I have been up almost

every river that is navigable and through the Everglades.

Some days ago I read a story written by a tourist, who stated that he had been up the Oklawaha River for the third time in his life and the captain pointed out to him the same old alligator each time, remarking that he hoped nobody would kill the brute because it was the only one on the entire River.

All in all this article is considerable of an improvement on the previous one, and I feel that if the writer would take another try at it he would write something quite acceptable to our people. The article in your April issue has raised quite a storm of indignation in the Press throughout the state, and I shall send the story on "Orange Growing in Florida," which appeared in your May issue, to the Florida East Coast Homeseeker, which devoted considerable space to answering your April article.—W. B. Powell, Secretary Tampa Board of Trade.

### C. A. Green's Reply to the Above Letter.

Green's Fruit Grower aims to give every person a fair deal, therefore we publish the above letter that those interested in Florida and Florida lands may have an opportunity to tell their story in response to certain statements that I have made, in which I referred to the poor soil and the swampy lands that I have seen in such parts of Florida as I have traveled over on two occasions, once about twelve years ago, immediately after the severe frost that did great injury, and once this past winter.

The above letter accuses me of untruthfulness. In other words, the writer says I have lied about Florida. I have not thus far charged Florida real estate men or others interested in Florida of having told falsehoods, but I will say now that whenever I have picked up a Florida paper I have found there generally under the heading "The Truth About Florida," palpable untruths seemingly intended to deceive prospective buyers of Florida lands.

I have been frank enough in my editorials on Florida to say that I have not seen all of the state and that I met a banker on the train taking me homeward, who told me that there was fertile land in Jackson county, Florida, where a tobacco company had expended I think \$9,000,000, in warehouses and in lands and equipments for growing and storing tobacco. I stated that I was aware that tobacco could not be grown on poor soil and therefore I would have to concede that there was good land in Florida. I furthermore stated that along the shores of rivers and in the beds of old lakes that had dried up there were patches of fertility in various parts of Florida where celery and other garden products could be profitably grown.

I have felt compelled to say on the other hand that I have traveled over a wide extent of this country from one ocean to the other, and over a considerable portion of Europe, and I have never seen in any one state so much unfertile soil as I have seen in the state of Florida. Nor have I seen in any state so much swamp land that could not be drained owing to the flatness of the country. I have good authority for stating that there are 19,000,000 acres of swamp land in Florida that at present cannot be cultivated.

I share the feeling of publishers generally throughout this country that the advertisements of real estate men and land promoters are as a class objectionable, and that they have a tendency to deceive, with one exception and that is the advertisements of railroad companies. Railroad companies, having secured possession of large tracts of farm lands, desire to sell these lands. Their object is to secure traffic through the shipment of produce grown on these lands that they sell, therefore they have no object in misrepresenting the character of their land.

Readers of Green's Fruit Grower see no wide announcement or advertisements of farms for sale in Monroe county or other parts of Western New York, and no promoters are at work booming these fertile farms about Rochester, N. Y., where I live.

Why is this so? My answer is that this locality is in some respects the Garden of Eden of the world. The farms here are all occupied by well-to-do successful farmers, and it is seldom that it is hardly possible to buy one of these farms at any price. It is not necessary for any promoting company to start out with a brass band and with a lot of silverware to induce people from other states to move in and occupy some of our valuable land. But in selling land in Florida I have found that it is necessary to employ a brass band, and to present to purchasers of the property silver teapots, pitchers, punch bowls and spoons and to give these useful table ornaments to whoever may purchase lots or farms. This suggests to me the fact that it is the unwary, the uninformed, the credulous, who are tempted to make purchases of real estate under such pecu-

liar and enticing, and I might say deceptive offers.

I have no object in telling what seems to me to be the truth about Florida. I have no land to sell at Rochester or in any other locality. I am the publisher of a periodical which goes into 125,000 homes. I constantly see a tendency of humanity at large, and my clientage in particular, to move about from one part of the country to another. I find people in the north weary of the long winters, who have dreamed of the land of the magnolia and the palm, and in their latter years desire a home in the sunny clime where there are no winters. I receive numerous letters asking where I can recommend my subscribers and readers to go for their health or for profit. My advice is generally to stay where they are. Moving is expensive and risky. I will never advise my readers under any circumstances to exchange their farms or to buy a farm in any part of the country, without first seeing them and studying the situation deliberately. Then the first thing to do is secure a search of title of the land, made by a competent person of your selection.

I have said to my friends that so far as I can see the best feature of Florida is in its climate. I never enjoyed better health or strength than during my two months stay at De Land, Florida, in February and March of this year. The nights were delightfully cool and the days comfortably warm. It was seldom excessively hot. Although we had several heavy falls of rain, I was able to play golf every day I was there except Sundays, when I went to church. Florida certainly has a delightful climate in winter, and I am told that it is not excessively hot in summer. I desire to give Florida credit for everything which can be truthfully said of that remarkable state.

Here is a Subscriber of Green's Fruit Grower who bought 10 acres without seeing it, whose letter came in the same mail as the one I replied to above.

Mr. C. A. Green:—I saw a letter in the last Fruit Grower from a Mr. George T. Powell, N. Y., and also your answer, which interested me very much, because we have bought land in Florida too. I was away at the time and my husband bought 10 acres some three years ago in "Jacksonville Heights," Jacksonville, Florida, and I have always been afraid he was fooled on it, but we don't know at all what it is, and couldn't afford to go and see it. Now if you or this Mr. Powell know anything about that place or that part of Florida would you be so kind as to write to me. Please give me his address at any rate. It was bought of Jacksonville Heights Improvement Company. It is in Duval County. I thought it might be a good chance to get to know something of this land we would need to sell it if it is saleable. It is paid for except for a few dollars.—Mrs. J. O. Cal.

C. A. Green's Reply: Dear Madam:—I passed through Jacksonville, Florida. It is a thriving city and a distributing point and a railroad center located on the St. Johns river. As I entered the city from the south, going north, I saw signs on which were the words "Jacksonville Heights." I cannot say exactly how far these Heights are from Jacksonville, but at a guess should estimate they were from eight to twelve miles south of Jacksonville, but I cannot make any careful estimate or statement as to the distance. I am sure of this that Jacksonville Heights are no part of Jacksonville city, but that it is a tract of land lying a considerable distance from Jacksonville.

The soil there, so far as I could see from the car window, was of that barren sandy nature which I have seen continually in my travels through Florida, and which is not valuable for fruit growing unless extravagant expenditures are made each year for fertilizers, as the soil seems to have but little fertility.

You do not say when you bought this property. Good property in Florida has advanced in value during the last five or ten years, and it is possible that your land may be worth all you paid for it or even more at the present time. But I assure you that you are unwise in buying land that you have never seen. I am surprised that intelligent people should do such a thing as that.

### Letter From Canal Zone, Panama.

Mr. Chas. A. Green, Editor:—Sometimes one has to go a long way from home to know what our neighbors are doing, and saying about us and others.

While spending a few weeks sightseeing in the Canal Zone, and visiting friends from your city, you can imagine I was pleased while killing time in one of the many offices here, to pick up a late copy (April No.) of Green's Fruit Grower. It naturally seemed like meeting an old friend, and I immediately begged permission to take it to my room.

Naturally I turned first to the editorial page to note your "Walks and Talks with Readers" and to my surprise and amazement the first I saw at the head of the



column under the title of "Florida Land" statements so adverse to my knowledge, experience and recent observations that I cannot refrain from taking exceptions to some of your statements.

Let me say in the beginning, that I have not a foot of land, nor any other interest in Florida, except a desire for fair play, and I will not believe you would knowingly misrepresent, or deprive a sister commonwealth who so lately passed through one of the greatest disasters that ever befell any region, of any of her merits. (I refer to the disastrous freeze of 1895 which was unprecedented, and even that did not effect the southern part of the state). When I say that all of my worldly interests are located in Wayne Co., N. Y. it should be evident that I have no axe to grind, and that I cannot be accused of being prejudiced.

I must say however that I resided continuously, summer and winter in Florida from 1874 to 1901, during which time I had occasion to travel over the greater part of the state and made many acquaintances, and think it no egotism in saying I believe I know Florida from end to end.

Let me say further, during Feb. and March of this year on my way to these parts I visited Florida and renewed the acquaintance of many old friends and noted with great satisfaction the growth and evidences of prosperity of every locality wherever I visited.

I assure you that in every part where I visited, especially in South Florida, I found every one of my old acquaintances, not only optimistic and hopeful, but thrifty and making money. Several who were only a few years ago working for others for a small wage, were now living in costly, up-to-date, and well furnished houses, many riding in launches or automobiles which had been paid for from the products of their own soil, or as some call it sand.

When you say that you never saw any fertile soil in that state, I must conclude that you confined your observations from a car window of a railroad overlooking the sea, for you certainly could not have been looking for fertile soil.

And when you say that "A large part of Florida is under water (swamp) and cannot be drained," I must refer you to the Government survey of the Everglades, which shows even there, it is from 14 to 18 feet above sea level, and that the great drainage of these parts is now drawing to a close, and further even before any drainage was commenced, instead of this swamp area being a large part, it would include but a very small percentage of the whole.

If you could have been with me during the two months visiting through Manatee, DeSota and Lee Counties, you would have seen from five to eight hundred dollars worth of celery, lettuce, cabbages and other vegetables taken from single acres. You would also have seen four and five hundred bushels of white potatoes and a like quantity of Bermuda onions from a like area, and grape fruit and oranges yielding much more in cash values.

These evidences of fertile soil can be seen by any one who have eyes to see. It may be true that it takes fertilizer, but does any successful farmer or fruit raiser attempt to cultivate land anywhere without its use?

One thing the Florida Agriculturist or Fruit grower does not have far to go for fertilizer. Although I cannot quote figures. Statistics show that hundreds of thousands of tons of fertilizer are annually taken from Florida to enrich the soil of other states which are not so fortunate.—A. S. Pendry, N. Y.

Note By C. A. Green:—I have nothing to take back of that which I have written about the poor soil of Florida. So far as I have seen Florida I have yet to see a fertile farm there. But I have not said that there is no good land in Florida. On the contrary I have said that there doubtless is some good soil there. I have heard that in Jackson Co. tobacco is grown and I know that only good soil can produce tobacco. I am told on good authority that there are 19,000,000 acres of swampy or undrained wet land in that state. Most of this is undrainable, owing to the level lay of the land.

#### Virginia Fruit.

Green's Fruit Grower.—I have several hundred Kieffer pear trees, set in one block with no other variety for cross-pollination, except one row of Gerber trees on one side of Kieffer block. These trees have been set six years, and have been thoroughly cultivated, pruned and sprayed every year during this time. They are large enough to bear a large crop of fruit this year. There has been no frost this spring since the buds began to swell. During all the time trees were in bloom, the weather was warm and clear. It seemed an ideal time for the pears to be thoroughly pollinated. There are twenty bee hives within a few hundred yards of orchard, and the bees were in the blossoms every day during the bloom until petals fell.

With a full bloom, and conditions so favorable, still, there are very few pears set on these trees. There are more pears on trees near the Gerber than on the others, but they are not full.

What do you think is the cause of pears not setting?

Will Kieffer pears bear full crops with no other than Kieffer pollen? What pears, blooming at same time as Kieffers, would you recommend for cross-pollination?

Gerber is all right for the pollen, but the fruit is not very valuable.

Would the Anjou pear be all right for cross-pollination with Kieffer?

If another variety must be scattered among these Kieffers in order to secure full crops of fruit, I want to bud enough of these trees, in June, to another variety to secure proper cross-pollination.

How few trees in every second row will be sufficient for cross-pollination, that is, say the first tree in row is Gerber, then how many Kieffers may be left, two, three, or what number would be best. Trees 20 feet apart.—P. S. Lane.

Reply: If fruit trees are growing very rapidly they are inclined to be unfruitful. The Kieffer pear fruits better when planted near several other varieties. Nobody knows exactly what variety is best for fertilizing the Kieffer. Some seasons the Kieffer pear blossoms fertilize themselves at Green's Fruit Farm, while other seasons they do not. Notice that seasons differ in this respect. If it rains almost continuously during the blooming season it may be impossible for the flowers to be fertilized even if there are trees nearby, for the bees cannot work and the pollen is apt to be washed out of the blossoms. If there are other pear trees within 100 ft. or even further away, they will be helpful in fertilizing the blossoms of the Kieffer. I cannot say positively which is the best apple for you to plant in Virginia.

A. C. Corbin, West Henrietta, N. Y. planted a few hundred peach trees last spring about May 1st.

Knowing that the season was dry and likely to be much dryer he thought out a system by which his peach trees would have moisture all summer.

In planting each tree he also planted four potatoes about six or ten inches from the tree. These potatoes grew and shaded the ground thus keeping the moisture around the roots of the peach trees.

The potatoes were not taken out in the fall but were left to enrich the soil.

Mr. Corbin lost only six trees out of the few hundred by planting in this way. As everyone knows last year was very dry so this was a wonderful showing for the driest season in years.

The above story was told by Mr. Corbin personally when he called at the office of Green's Fruit Grower.

Note by C. A. Green: I cannot think that the potatoes growing so closely to the trees added any moisture during the growing season.

C. A. Green's Reply to Inquirer: Budding wood cut from peach trees for propagation of the peach are never taken from any wood except the new growth of the season in which the budding work is done. The buds at the tip of these scions and close to the base are not considered so good as the other buds on the budding sticks of the peach. Leaf buds are slim and pointed while blossom buds are round and plump. The leaf buds are usually found between buds, or alone without blossom buds. When the bud seems to unite with the stock but does not grow the next season you may suspect that the blossom bud was inserted instead of the leaf bud.

It is held by most orchardists that pruning done when the tree is in leaf, that is in July, August or September, promotes the formation of fruit buds, while pruning done while the trees are not in leaf excites growth on the branches of trees rather than the formation of fruit buds.

#### Cold Storage House.

Green's Fruit Grower:—I am contemplating building a cold storage for two or three thousand barrels of apples.

Can you give me some information as to the construction of building. Have a good supply of sand stone near. Would they make good walls.

Also have several thousand feet, 3-inch planks 26 feet long, also 25 pieces of heavy timber same length. Can these be used or can the stone and lumber be used together.

Any information as to the above at your earliest convenience will be appreciated.—J. E. Smith.

C. A. Green's Reply: I have told all I know about cold storage buildings over and over again in Green's Fruit Grower. I have nothing new to communicate. Any person building a cold storage house for the storage of fruit should secure the services of an expert as well as an architect. The architect should be able to

find an expert to advise and give particulars as to construction. There are many kinds of cold storage houses, therefore an expert in making one kind of building would not be qualified to advise about making another kind. One method is by ventilation shafts, another by ice, another by brine, and another by the ammonia process, each having its advocates. Madison Cooper, publisher of "Cold" magazine, Calcium, N. Y., is an expert on one of these methods.

Weeds.—A book on Weeds written by W. S. Blatchley, the noted naturalist and botanist, who was for sixteen years state geologist of Indiana, has recently been published by the Nature Publishing Co. of Indianapolis, Indiana. Price \$1.00 postpaid.

Insect on Currant Leaves Submitted to New York Agricultural Experiment Station, Geneva, N. Y.

Reply to C. A. Green:—Your letter of May 22 inclosing a letter in regard to injury to currants by insects at hand. After a careful examination of the leaves I am unable to positively identify the injury. The leaves appear to have been injured by frost or by plant lice and certainly not by any slug as your correspondent states.

It is possible that the injury he describes as occurring last year may have been caused by the four-lined leaf-bug. The work of this insect is described in Cornell Bulletin 58. Briefly, it has a rather large

list of food plants but is particularly injurious to the young foliage of currant and gooseberry. The presence of the pest is indicated by the appearance of peculiar brown depressed spots on the tender terminal leaves during early summer. This injury is due to the sucking of the juices from the leaf by the nymphs which hatch in late May or early June from the overwintering eggs. These nymphs grow rapidly, becoming full grown in about twenty days. They are easily recognized by the shining, vermilion-red color of the body, marked with large, blackish spots on the thorax. As the nymphs increase in size the spots on the leaves are a little larger and more numerous until not only hundreds occur on a single leaf but often nearly the whole leaf is spotted and brown. This injury causes the tip to die and reduces the amount of foliage which would tend to prevent the maturing of the berries. It may be controlled by the use of kerosene emulsion containing 10-per cent. kerosene. Tobacco extracts properly diluted should also prove efficient for this purpose.—W. J. Schorme, Assistant Entomologist.

Only great artists have the power to feel small in the presence of Art.—Sienkiewicz.

No city is great unless it rests the eye, feeds the intellect, and leads its people out of the bondage of the commonplace.—George W. Stevens, Director Toledo Museum.

## The New Orange and Fruit Knife

All of that sticky feeling is gone when you eat an orange with one of these knives. With a set of these knives in the home

you can treat your guests to oranges without making them wish they hadn't come. These special orange and fruit knives are forged from one piece of solid steel and are carefully ground and tempered. First covered with a coat of pure copper and then with the best pennyweight standard plate of pure silver warranted.

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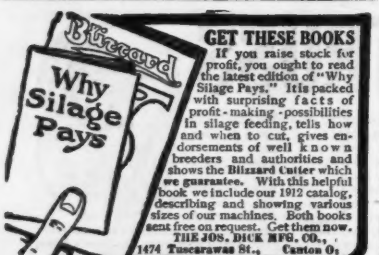
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When you write advertisers Please mention Green's Fruit Grower.

### Propping Up Peach Trees.

Green's Fruit Grower:—I would be pleased if you would show us, or tell us, through your paper, the best way to prop fruit trees, our peach trees are loaded down. Have sprayed twice.

I would not think of doing without your paper, I am taking other fruit papers, but I like Green's best of all.—J. R. Williams, Tennessee.

C. A. Green's Reply: The best way to treat peach trees or any other fruit trees so heavily laden with fruit as to make the branches liable to breakage is to remove half of the fruit or more in June or July. This is the course that would be pursued by our best orchardists. Even after the fruit has been thinned, the branches may need some support, but I can think of nothing better than a pole with a forked notch in the upper end where a branch has grown or a board with a notch cut in it, both of which are to be used in the common ways as props. Usually a tree properly trained and carrying only a reasonable burden of fruit will require no propping. One advantage in having low-headed trees is that in case it should be necessary to sustain the branches when heavily laden with fruit, the branches on the low-headed trees can be propped up with much less expense than high-headed trees.

### Trees Don't Fruit.

C. A. Green's Reply: I cannot explain the cause of these blossoms failing to produce fruit, but surmise that possibly heavy, drenching rains washed out the pollen of the blossoms or interfered in other ways with their vitality, or that possibly the trees are growing very fast, which sometimes interferes with their fruiting. Some varieties of dwarf pears, like the Bartlett and Howell, have a tendency to bear fruit very early while others, like the Duchess, are inclined to bear fruit later.

Editor Green's Fruit Grower:—I have several acres of Red Cross Currants set three or four years between peach trees and they are very much crowded, but have given very large crops and the plant seems to be in good condition, being free from currant worms and other troubles, but the ends of the stems are bare and there remains about two or three currants on each stem although they set very full indeed early in the season and gave evidence of a very large crop, but they have dropped from time to time until now the crop will amount to very little.

We have had a very severe winter and very cold wet spring and all peach buds are dead and I think possible the severe weather may have caused this falling off of the currants, but I will consider it a favor if you will endeavor to give me the cause and remedy for another season if possible.

Referring to the close planting and very large growth of the plants, would it be advisable to take out and replant elsewhere every other plant or would it be wiser to take out the currants entirely as the peach trees are only about fifteen feet apart and almost touch branches or will do so in a year or so as they are only three years set.—H. W. Cobb, N. Y.

C. A. Green's Reply: Peach trees grow so rapidly and the roots so soon occupy all of the soil between the rows that between the rows in such orchards are a poor place for planting currants or other small fruits. The best you can do is to enrich the ground and keep it well cultivated, thinning out the canes of the currants and heading them back somewhat each year, by which means you will get several moderate crops, but the fruit will be smaller and less abundant than it would have been if the currants were planted in a plantation by themselves. Old currant bushes dug up and transplanted are not liable to amount to much.

Experience With Currants.—Mr. Green in his magazine tells of a big crop of currants and a single bush that gave seventeen and a half pounds of fruit but did not state of what variety. For two years I have been testing the Diploma red currant with much interest. Who would think that a boy like me, eighty-two years old, would think of buying plants of the currant to test? I have tried many varieties which have not given me satisfaction. Some of the bushes have yielded from ten to twelve quarts. For thirty-four years I have been trying to find out which are the best varieties. In one lot was a cutting of the cherry currant. Then a neighbor came to me with a statement similar to yours that he had secured from one bush ten quarts of currants. Ten quarts is not bad but from ten to fifteen quarts per bush is much better. From the cherry currant bushes I have secured nineteen quarts.—J. H. Hadsell, N. Y.

### A Curious Question.

Green's Fruit Grower.—In the May Number of the Fruit Grower in "Walks and Talks" of Chas. A. Green I was much

interested in a short article on the growth of a great oak tree, as to whence came the material that went to make up its great bulk. Now I have a query or two for Mr. Green's (or any one else's) solution: How old must the sap portion of the various kinds of trees become before it turns to heart wood, and also what chemical change takes place when this change is made, that makes the heart wood so much more durable or less liable to rot, than the sap wood? Do all trees of the same species, the common pine for instance, have the same number of sap rings outside of the heart wood or not? It is generally admitted that each ring stands for one year's growth and I think this idea correct, then at what time of the year, or of the growing period is this change of sap to heart wood made?

I have put this query to old men of 70 years and ones who have cut timber all their lives and have never yet found one who had even thought of the matter at all, the idea never having suggested itself to them. Some have even suggested that the "heart" as we see it, was in the tree from its infancy.

This change from sap to heart is nicely shown in pine boards cut several thicknesses away from the center of the log where the heart and sap-wood shade or blend almost insensibly the one into the other. One of the best places to observe these shadings is in the fine lumber used in the backs of church pews that have been varnished on the natural wood.

Can Chas. A. Green, or any one, throw any light upon these two queries?—E. G. Kinsell, Md.

C. A. Green's Reply: No, I cannot answer your questions and do not know of anyone who can. You might almost as well ask if I know how old the blood is in the human body that forms the liver or other internal organs. Simply apply your questions to the human body instead of to the tree and you will see that the questions are unanswerable. There is much that is not yet known in regard to the growth and nutriment of the body of an animal or of the body of a tree, plant or vine.

It isn't enough to make both ends meet. You must tie them together.

### Up-to-Date Religion.

Written for Green's Fruit Grower

By Unkel Dudley.

The Up-to-Date Religion is the very best kind tu hev on this erth bekaws it is so nice, an so pliabul, an so easy tu get. We oftun wonder why evry one doesn't embrace it. You kan hev it an go tu ol the partiz, publik balls, an theaters you want tu an enjoy them. It is so pliabul yu kan do eny thing yu want tu'n be just az good as uthur up-tu-date Christian. Then it iz so easy tu get. Why ol yu hev tu do iz sign er card or raise yure hand, thus signifyin that yu want tu get religun an jine the chuch. Az soon az yu do this the pastur an the deakuns wil help yu ol they kan. You go before the komitte an they vote tu accep you an the pastur baptizes yu, an lo yu hev got religun an ar a full fledged chuch membr. Still further, yu kan hev tons ov this religun and the world's pepul wunt know that yu hev got it. You eil find it the most handy an convenient thing yu ever possessed. If you ar goin off tu atend sum religus gatherin yu kan put er lot ov it in with yure best bsum shirt an take it with yu. If yu er goin tu sum plase ov amuzment, where religun iz needed az much az sand iz in the grate Sahara desert, yu kan put er litul in yure poket tu use in kase yu shud need it. If yu ar goin into sum questhunabul biznes yu kan leve it ol at home, and it wont trouble yu. You wont need tu go tu meeting Sundays unles yu want tu, but yu kan spend yure Sabbath the same az yu hev dun.

You will be expected tu pay sumthing toards the pastur's salary an the expenses ov the chuch. We wud advize yu tu kontribute liberally for these things, bekaws if yu ar kaught in eny krooked deals or uthur kussednes the chuch wil only wink at them bekaws ov yure liberal kontribushuns. You wont need tu do eny prayin, for yure pastur wil do it for you. If yu shud atend sum soshul meetin an wanted tu appear religus yu kud read a vers out ov the hym book or the Bible, an it wud be ol right.

This beats the Old Time Religion ol tu smithureens. To get that men got down on their nees before God, and kried for mercy an pardun, an when they found Him they wauked an tawked with Him, an let the world an its pleasures go. It kost them er grate deal, but it paid well ol the way. And when they kame tu last hours ov life it held like er mity ankur tu the soul and enabul them tu kalmly meet the dred mesenger. In life's last hours this Up-to-Date Religun wil be worse than er roken reed tu lean upon, an in the presnes ov death its sofistic teachins wil vanish like mists before the sun. In this land ov the free, yu kan take yure choise, but yu wil hev tu pay the price.

### Buying Fruit For The Eyes.

There is something to be said also in favor of buying for the eyes. Women naturally want the apples and oranges, the berries and vegetables and other viands on their tables to look pretty and inviting. This being the case, it seems as if there were no way out of the difficulty. But there is. We can reconcile the eye and the palate by breeding fruits and vegetables that combine good looks with good flavor. Luther Burbank has done the world a great service by originating new fruits and vegetables; but his greatest achievement is his demonstration that there is virtually no limit to obtaining fruits of any size, form, or flavor desired, and that the good looks and flavor can be combined at pleasure with shipping and keeping qualities. He himself is preparing many pleasant surprises of this kind besides the one just referred to, and hundreds of others are at work on the same problems, on which, indeed, the government is at present spending millions. Every state has its agricultural experimental station, where expert hybridizers and variety makers are helping to multiply our pleasures of the table.

### Mark Twain Says.

If you pick up a starving dog and make him prosperous he will not bite you. This is the principal difference between a dog and a man.

A man may have no bad habits and have worse.

It is more trouble to make a maxim than it is to do right.

Pity is for the living, envy is for the dead.

The spirit of wrath—not the words—is the sin; and the spirit of wrath is cursing. We begin to swear before we can talk.

The man who is ostentatious of his modesty is twin to the statue that wears a fig-leaf.

The very ink with which all history is written is merely fluid prejudice.

There isn't a parallel of latitude but thinks it would have been the equator if it had had its rights.

All say, "How hard it is that we have to die." A strange complaint to come from the mouths of people who have had to live.

When angry, count four; when very angry, swear.

Prosperity is the best protector of principle.

### Flies and Other Pests.

During the winter months, when the flies and mosquitoes are not here to annoy us, we are apt to forget our campaign against them. Tin cans and other refuse from the kitchen will be thrown out wherever it is most convenient, because the housewife doesn't care to get any farther away from the house than she is really compelled to when the weather is bad, says Penna Farmer. She, as well as other members of the family, is apt to forget that this refuse will, when summer time comes, provide a fertile field for the larvae of the house fly. In all decaying animal and vegetable matter flies multiply very rapidly, and in any receptacle that will hold water mosquitos will breed. Consequently if we are desirous of freeing our premises of these disease carriers, we should look more closely to destroying their breeding places.

In the summer when we "swat the fly" we kill that particular fly and prevent many more, but when we remove the hatching places we go a step further.

Dr. Hutchison says: "During the past five years closer study of the subject has brought out the curious fact that most of these insects which carry disease, such as the malarial mosquito, the yellow fever mosquito and the house fly, live and multiply only in the immediate neighborhood of human habitations. In other words they are literally domestic animals. This is absolutely true of the house fly and yellow fever mosquito, neither of which is found more than a mile or two, usually not more than a few hundred yards, away from human habitation. Either they need human blood to enable them to thrive, or more probably, the ponds, waterholes, and puddles formed either intentionally or unintentionally by man in his settlements furnish them the special kind of breeding ground that they need."

If the greatest precautions are to be taken in the eradication of these disease carriers, then it becomes imperative that every square foot of ground within a radius of two hundred yards of the house be gone over and cleared of decaying substances and then kept cleared. Not only should decaying animal and vegetable matter be removed, but other refuse as well.

"There's no coal left in the cellar, ma'am." "Why didn't you tell me before, Mary?" "Because there was some ma'am."—Punch.



## GREEN'S FRUIT GROWER

### Plant an Orchard.

Don't neglect your orchard if you have one. If you haven't a respectable sized orchard on the place, don't stand in your own light any longer but set one out. The preserves, jams, marmalades, etc., that you enjoy so much through the fall and winter should remind you of the necessity of having a first-class and good-sized orchard.

Fruit is the best medicine that we know anything about. Money invested in apples and strawberries is much better invested than it is in "sulphur and molasses," to say nothing about the expensive "nostrums."

The farmer can raise his own fruit cheaper than he can buy it, says one. No he can't; that is, some farmers can't, for a pound of dried peaches and a quarter's worth of prunes will last the entire season. The live farmer who wants to enjoy life as he goes along can raise fruit cheaper than he can buy it for he will want the fruit in its season from the earliest strawberry to the last of the winter apples until the strawberries come again. Fruit used in that way helps a man to enjoy life.

### Importance of the Dairy Industry.

By Frank B. White in Good Advertising. Forty-cent butter may be too much of a luxury for most people, yet how many realize that milk at 7 cents per quart is twice as costly as is butter at 42 cents per pound?

Twelve quarts of milk are required to produce one pound of butter. Five quarts to make one pound of American cheese. If butter was sold on the basis of milk prices the price of butter would be just double what it is.

Owing to weather and crop conditions in 1911, the production of milk was very much below normal, and this is the one and only cause of a shortage of butter and cheese and the consequent high prices now prevailing. A year ago, owing to good crop conditions and a heavy run of milk during 1910, the consuming demand was below the production of butter and cheese, and it resulted in these low prices.

In Japan condensed milk is made from beans. Scientists and inventors think it possible to make butter directly out of grass and eliminate the cow. So there is hope that we may yet buy butter as cheap as hay.

I find a few facts that are rather astounding. Recent statistics indicate that we have in the United States 20,699,000 milch cows. Wisconsin is in the lead with 1,504,000. Nevada has the smallest number, 20,000. The largest average price goes to the state of Washington, which is \$54 per cow. New Jersey is a close second, \$53.20. The largest number of farms devoted to dairying brings us again to Wisconsin with 1,504,000, and New York a close second with 1,495,000. The aggre-

gate volume is led by New York, 64,734,000 and Wisconsin seconds it, 60,762,000.

It will be shown that we must deal in large figures when we refer to the value of the dairy cow and the annual product which is fabulous in milk, butter and cheese. Wherever you find a dairy section you will see good farms, good homes and a happy people. Yes, there is work connected with it, but it is the kind of work that yields a satisfactory return.

The wise advertiser in making an analysis of mediums, of desirable territory and of other things necessary to determine value will not fail to appreciate the dairyman and will include papers that pay most attention to dairy farming.

### The Quality of Apples.

To be successful in fruit growing more attention must be given to secure fruit of high quality. If only first-class fruit be offered for sale the demand for it will be enormously increased. Quantity has been too long the chief aim of growers. The inferior varieties, that yield more largely, have taken the place of those of finer quality, which were shy bearers. This has been especially true of apples. Color has, however, counted as an important factor, and the red varieties, though sometimes inferior, have been in better demand than varieties superior for cooking or eating, that lacked color. Most people like a Greening apple better than a Baldwin, but because the latter has color and is quite as productive it has had the preference. The fall Pippin and Swaar are even better than the Greening in quality, but they are shy bearers and cannot be grown with profit without high culture and manuring. The Spitzenberg has good color, but it is not a strong-growing tree and is a poor bearer, and is now not largely grown for market. One reason for defective yields and poor quality of apples is, we believe, the decrease of mineral fertilizers in the soil. The stronger and more vigorous growth of the Baldwin and Greening trees enabled their roots to gather more potash, phosphate, and other material for perfecting the fruit. But within two or three years these varieties, especially the Baldwin, have proven less reliable to produce a crop than they used to be. On the other hand, trees of the Spitzenberg variety, which were liberally manured with wood ashes and phosphate, maintained a healthy dark green foliage until fall and ripened large and finely-colored fruit. The deficiency of mineral manures is seen first in the foliage, which is easily injured by blight. Of course wherever the foliage is destroyed the fruit is poor or fails entirely.

"Take away woman!" shouted the orator, "and what would follow?" "We would," said a man at the back of the audience, promptly.—Wonder.

### Humorous.

Dentist: "What are the last teeth that come?" Brilliant Student: "False teeth I guess."—Life.

Mother: "The doctor says you must eat meat and fruit." Sick Boy: "Well, gimme some mince pie."—Credit Lost.

"What's your opinion of the coming woman?" He: "I can't tell, but I suspect she will keep us waiting just like the others."

"Where were you when the assault occurred?" asked the judge of the victim "Sure'n O'i dun'no', yer honor. He hit me so hard O'i couldn't say."—Harper's Bazar.

Augustus: "Why do you so persistently wear the hair of another woman on your head?" Beatrice: "For the same reason that you wear the skin of another calf on your feet."

Customer (who has just purchased a wonderfully cheap set of furniture): "Do you always pack furniture carefully before delivering it?" New Boy: "This kind we do, 'cause the jarring would shake it to pieces."

"I wish," said the potato bug, "that they'd feed me something different. I'm getting kind o' tired of Paris green." "Try some of this corn," said the cutworm; "the coal tar they soaked it in makes it very nice, I think." "This is always the most trying season of the year, anyhow," said the curello. "Later, when green leaves dressed with kerosene emulsion are in season, we'll all have a chance to get fat."

### Failure to Fertilize.

It has been known that in many early blooming trees the stamens can be excited to growth by a much lower temperature than will excite the pistil to growth, writes Jos. Meehan. A few warm winter days will so often advance the stamens in plum flowers that the pollen disappears before the pistil is receptive. Plum crops often partially fall for lack of the necessary fertilization. Practical men have long since discovered that a south aspect is not as good for fruit trees as any of the others, without knowing the real reason.

### Mother Seal Can Locate Its Own Youngster Among Thousands.

The instinct of the seal is marvelous. It will leave its young on the ice in the morning and, going down through a hole, remain away all day swimming in search of food, says Wide World Magazine. Returning in the evening, it will locate its offspring in the same "patch" among hundreds of thousands of other baby seals, notwithstanding that the ice may have wheeled or drifted fifty or sixty miles during the day from wind and tide, and notwithstanding that the patch may extend thirty or forty miles from one end to the other.

Whether this instinct is of the class that enables the bird, without any mark or chart, in a forest with millions of trees alike, to find its way back with ease and precision to its nest. I do not know, but it is one of those wonders in nature before which human knowledge is brought to a full stop.

### The King Bird.

To offset the wicked side of the kingbird's life, let us see if we can say anything in its favor. The United States agricultural report of 1893 says that the stomachs of 171 kingbirds from different states were carefully examined and only fourteen of the 171 contained any trace of the honey bee, and of the fifty bees found forty of them were positively identified as drones, while only four of the other ten were identified as workers, six being too far decomposed to show which they were. Score one for the kingbird on that.

Now there is no doubt that the kingbird destroys myriads of noxious insects on all kinds. The same agricultural report says the kingbird is very fond of "robber flies," and that their remains have been found quite liberally in the bird's stomach. We have the authority of Professor Riley to the effect that one of the big flies has been known to kill 141 honey bees in a single day.

### Don'ts For Wives.

—Don't expect impossibilities from your husband.

—Don't snub him in the presence of strangers.

—Don't henpeck him just because you know he is quiet and will stand it.

—Don't treat him as if you had come down off a pedestal to marry him.

—Don't worry him to death because you cannot have your dearest wish granted.

—Don't run to your mother with all his faults; rather keep his good qualities to light and hide his failures.

—Don't think that now you are married he doesn't care whether you curl your hair or not.

—Don't expect him to be amiable with a breakfast of tough steak, greasy potatoes, cold rolls and muddy coffee.

—Don't have cold suppers. Remember the nearest way to a man's heart is through his stomach.

—Don't sit up waiting for your husband: Go to bed, get all the sleep you can. In the morning when you are looking and feeling your best, if you have anything to say, say it; nine chances out of ten you will win.

"Does your wife object when you stay out late at night?" She couldn't file more objections, my dear sir, if she were a corporation lawyer.—Detroit "Free Press."

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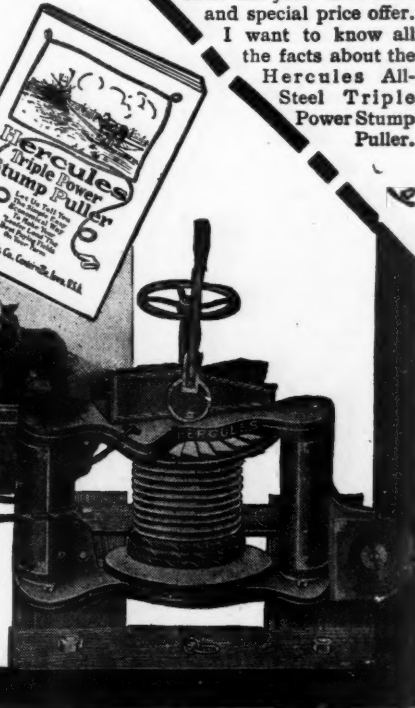
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Stumps cost big money! They take half the realty value away from the land. They rob you of crops and profits you ought to have. On a 40-acre stump field the profits derived from stump pulling the first year are \$1281 and up according to the value of the land—from \$750 up in crops every year after. 5000 men who write me first will receive a money-making, money-saving offer on the



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**1 1/4¢ PER SQUARE FOOT Buys Best Corrugated Steel Roofing**  
**—Only REAL Roof Protection—Better, Cheaper Than Shingles, Slate or Composition That Rot and Leak—Absolutely Wind, Rain, Snow, Frost and Lightning Proof—Fire Resisting—Easy To Lay—Wonderful Bargain—All Low Price Records Smashed To Smithereens! Your Chance of a Lifetime—NOW!!!**

Yes—this is big news of tremendous importance to every one who has need now, or expects to have need in the future, of steel roofing for any building purpose. Just think of it! Guaranteed corrugated steel roofing and ceiling at only 1 1/4¢ per square foot—just a fraction of its actual worth! The Chicago House Wrecking Co., known from Ocean to Ocean as America's Great and only Price Wreckers. Our leadership in money saving for the people is undisputed. We have sold thousands of big bargains to our customers in the past, and our business has grown to mammoth proportions as a result, but we want to set down right here in "black and white" that this wonderful Steel Roofing Sale at 1 1/4¢ a foot outdoes anything we have ever been fortunate enough to do for our patrons during our entire business career. When we say—"S-M-A-S-H—GO ROOFING PRICES", we MEAN smashed roofing prices—not just a little bit lower than anybody ever offered steel roofing for before, but "S-M-A-S-H-E-D" prices—flattened out with a steam roller—prices that will shake the very foundations of the roofing industry and drive out all competition like dead leaves before the whirlwind. You who read this Extraordinary Offer of

## Brand New Guaranteed Corrugated Steel Roofing At Only 1 1/4¢ Per Square Foot

will instantly realize that here is your lucky chance of a lifetime to buy the best roofing in the world at a mere fraction of its real value. Now here's the reason: Our enormous buying power enabled us recently to pick up for spot cash a stock of this Brand New, Perfect, Corrugated Steel "V" Crimped and Standing Seam Roofing and Brick Siding, at a tremendous sacrifice 'way under what it is actually worth. Immediate cash needed, made possible this purchase—couldn't wait—we had the ready cash—their loss was our customers' gain—"it's an ill wind that blows nobody good." Just another chapter added to the long list of Chicago House Wrecking Co.'s Famous Special Bargain Sales. We pass the roofing along to you now at our usual advance of one small added profit.

## Steel Roofing Practically Indestructible

There is nothing else that compares with Corrugated Steel for REAL PROTECTION. It makes a life long roof. Outlasts all other kinds of roofing many times. It's fire, rain, frost, wind, sun and lightning-proof—warmer in winter—cooler in summer—and, under ordinary circumstances, it can't leak, rot, warp or taint rain water. You can absolutely depend upon it that Corrugated Steel is far and away the most perfect material for roofing, siding and ceiling ever known.

## Galvanized Steel Roofing 2 1/2¢ Square Foot

Another big Steel Roofing Bargain. 35,000 squares, very highest grade, specially coated, corrugated galvanized roofing and siding, made of specially prepared steel of a quality superior to anything before produced. Practically rust proof and will last a lifetime. Full size sheets; we will furnish it in suitable lengths for any purpose. Only a limited quantity, so we urge you to send us your order immediately without waiting to write us again. Price only 2 1/2¢ per square foot and it will outlast four to one. Just drop us a line—tell us your requirements—size of your building and other general facts and we will help you select proper size sheets. If you are not ready to use material now, we will reserve it for future delivery. If you prefer some other style than the corrugated we will furnish it. We have this same grade in "V" Crimped, Standing Seam and Brick Siding.

## Ready Roofing, With Supplies, 3/4¢ Square Ft.

Many people are prejudiced against rubber surface, or prepared asphalt roofings. We have not been pushing the sale of such roofing because we have such implicit faith in steel roofing and are so thoroughly convinced that it is absolutely the best all around roof covering a man can buy, that we urge our customers to buy steel in preference to ready roofing. However, many people will use nothing but ready roofing and for them we have a bargain proposition that no one else can equal: At 3/4¢ per square foot we will furnish the very highest quality Ready Asphalt Smooth Surface Roofing—just about 40% cheaper than you can buy similar quality for elsewhere. Just think—only 75¢ for complete roll of 108 sq. ft. You get the extra 3 feet for laps, FREE. Mind you, we guarantee the lasting quality of this roofing to be equal to any Ready Roofing manufactured. We have hesitated to duplicate the somewhat exaggerated statements of others regarding the life of Ready Roofing, but you may depend upon it that the quality we are offering at 3/4¢ per sq. ft. is just as good as anything ever produced in this line. We have other grades. Write for facts and free samples.

## Send For Free Roofing Catalog and Samples

Remember, we can give you these extraordinary bargains only because we made a truly remarkable purchase. Such a wonder 1 roofing chance never occurred before—maybe never again! It is your one BIG opportunity—don't pass it by! Send at once for our Roofing Catalog, Free Samples and Full Instructions for Laying Roof. No need writing a letter, simply use Special Roofing Sale Coupon by writing your name and address in same—we will understand that you simply want full information, samples, prices and specifications which will be sent you at once, prepaid. Send no money—just name and address.

**Never Buy A Thing Until You Get Our Prices**

**SPECIAL SALE** Have Us Lay Aside A Supply For You No Deposit Needed

**Brand New Perfect Steel Roofing—While Supply Lasts—At the Unheard of Low Price—1 1/4¢ per Sq. Ft.—Galvanized Steel Roofing 2 1/2¢—Ready Roofing 3/4¢**

This is your chance to lay in your supply of steel roofing at a tremendous saving. But if you want to get your share of this bargain, you must send in your reservation at once. We want you to realize that this is a very unusual offer, and we have what would be a large stock for any other concern, remember that we have hundreds of thousands of customers all over the country who regularly watch for our advertisements for special bargains for home and farm. We have never before offered such a wonderful value. We expect even our big supply of this roofing will be eagerly grabbed up by our regular customers who never buy a thing until they get our prices. No need, however, to buy now. Simply write us a letter, postal or mail coupon for samples, then state about when you will want your supply and we will hold it for you without deposit, or if desired we will make immediate shipment. This is your opportunity to get your supply of Steel Roofing at a price that will net you a tremendous saving. But by no means overlook this opportunity. Get our samples at once and our complete prices. They will startle you. You will be surprised at what a trifling cost you can now throw away your troublesome shingles, slate and prepared roofing, and have for all time, complete shelter that will cause you no further trouble. Cut out and mail Free Coupon right now.

**CHICAGO HOUSE WRECKING COMPANY,**  
 35th and Iron Streets, Dept. E3, Chicago, Illinois

## EXPLANATION

The Chicago House Wrecking Co. is the most wonderful commercial institution in Chicago. Its plant covers over 40 acres. It is the most enterprising institution of its kind in the world.

The capital stock of this Company is \$2,000,000, which is sufficient evidence of our responsibility. Any bank or commercial institution anywhere will confirm the responsibility of this Company. Ask the publisher of this or any other paper.

## Why We Are Called the "Price Wreckers"

Did you ever stop to think what becomes of the stocks of goods when a Manufacturer, Jobber or Big Retail Dealer goes bankrupt—"busted" as the saying is? If the stock is sufficiently large, if the goods are new, clean and desirable, and the price is cut right to the bone, they find their way naturally to the Chicago House Wrecking Co.'s 40-Acre Plant for distribution at one small added profit to their hundreds of thousands of customers who in this way get wonderful bargains many times for only a mere fraction of the cost to manufacture. There's not another concern on earth that can meet our prices, simply because no other concern has the buying and economical distributing facilities which we enjoy.

Every time you buy from us, you increase the amount of your savings account. We are a safe valve between the public and high prices. We recognize no Trust or Association—we buy our goods under new and improved methods—none of the old merchandise game about us. When you deal with us, your dollar takes on an added purchasing power. One trial will convince you and make you forever one of our good, reliable customers.

## Practically Everything "Under the Sun"

Our stock includes practically everything "under the sun." That means Building Material, Lumber, Roofing, Sash, Doors, Millwork, Wire and Fencing; Hardware, Plumbing Material, Heating Apparatus and Supplies; Furniture, Household Goods, Rugs, Stoves and everything needed to furnish or equip your home, your club or hotel; Groceries, Clothing, Dry Goods, Shoes, Furnishing Goods—every single article needed to cloth a man, woman or child; Sporting Goods, including fishing tackle, hunting outfits, tents, guns, harness and vehicles; Jewelry, Sewing Machines, etc. You can't think of a single manufactured article that we can't supply you at a saving in price.

## You're Absolutely Safe In Dealing With Us

For twenty years this Company has been well and favorably known to hundreds of thousands of customers throughout this land, and our honest public dealings have made us friends everywhere. The nature of our guarantee under which we sell all our merchandise is so broad and binding that there is no possible chance for you to make a mistake in buying from us. We say to you: No matter what you buy from us, if it fails to come up to your expectations, or differs from our description, or is not in every way a downright bargain, we will take back such unsatisfactory merchandise at our freight expense both ways, and will refund the full purchase price. All you need to do is to write us that you are not satisfied, and we promise you quick correction of our mistakes. We want you to remain as one of our continuously satisfied patrons.

## Get A Copy of 1,000-Page Catalog—Free

Our enormous stocks of merchandise are accurately described and illustrated in our mammoth 1000-page, illustrated wonderful Price Wrecker. You may have a copy, FREE. Write for it today. Also ask us to send you extracts from our unsolicited testimonial letters. We have thousands of customers who have bought roofing and other supplies from us, and have secured the same satisfaction we offer you.

## FREE SAMPLE COUPON

**Chicago House Wrecking Co.,**  
 35th and Iron Sts., Dept. E3, Chicago

Gentlemen:

Without any promise to buy or obligation of any kind on my part, please send me, FREE, samples, prices and full particulars of your wonderful Steel Roofing Special Bargain Sale, together with your valuable Catalog, completely describing Roofing, Siding and Ceiling.

Building..... Size.....

Name.....

Address.....